TRANSCRIPT OF RECORD.

SUPREME COURT OF THE UNITED STATES.

No. 164

JAMES C. STIMPSON, PLAINTIFF IN ERROR,

vs.

CHARLES T. WOODMAN.

IN ERROR TO THE CIRCUIT COURT OF THE UNITED STATES FOR THE DISTRICT OF MASSACHUSETTS.

FILED DECEMBER 14, 1885.

12.

SUPREME COURT OF THE UNITED STATES.

No. 376.

JAMES C. STIMPSON, PLAINTIFF IN ERROR,

vs.

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IN ERROR TO THE CIRCUIT COURT OF THE UNITED STATES FOR THE DISTRICT OF MASSACHUSETTS.

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1 UNITED STATES, *ss:*

[SEAL.] The President of the United States to the judges of the circuit court holden in and for the district of Massachusetts, greeting:

Because that in the record and process, and also in the rendering of judgment in a suit before you, or some of you, between Charles T. Woodman, of Boston, in said district, manufacturer, plaintiff, and James C. Stimpson, of Salem, in the county of Essex in said district, tanner & currier, defendant, in a plea of trespass on the case, a manifest error has intervened to the great damage of the said James C. Stimpson, as in his complaint has been stated. And as it is just and proper that the error, if any there be, should be corrected in due manner, and that full and speedy justice should be done to the parties aforesaid in this behalf, you are hereby commanded, that, if judgment thereof be given, then, under your seal, you do distinctly and openly send the record and process in the suit aforesaid, with all things concerning them, and this writ, so that you have the same before the Chief Justice and the associate justices of the Supreme Court of the United States, on the first Monday of December next, at Washington, being the present seat of the national government; that the record and process aforesaid being inspected, they may cause to be done thereupon what of right ought to be done.

Witness the Honorable Salmon P. Chase, esquire, Chief Justice of the said Supreme Court, at Washington aforesaid, this sixth day of October, in the year of our Lord one thousand eight hundred and sixty-eight, and of the independence of the United States the ninety-third.

JOHN G. STETSON, *Clerk.*

Allowed by NATHAN CLIFFORD,
Asso. Jus. Sup. Ct U. S.

UNITED STATES OF AMERICA,
CIRCUIT COURT OF THE UNITED STATES,
Massachusetts District, ss:

And now here the judges of the circuit court of the United States in and for the said district, make return of this writ, by answering hereto and sending herewith, under the seal of the said circuit court, a true and attested copy of the record and process in the suit within mentioned and of all proceedings therein.

In testimony whereof, I John G. Stetson, clerk of said circuit court of the United States within and for the district of Massachusetts, have hereunto set my hand and the seal of said court this twenty-fourth day of November, A. D. 1868.

[SEAL.] JOHN G. STETSON, *Clerk.*

2 UNITED STATES OF AMERICA,
Massachusetts District, ss:

At a circuit court of the United States for the first circuit, begun and holden at Boston, within and for the district of Massachusetts, on Friday, the fifteenth day of May, in the year of our Lord one thousand eight hundred and sixty-eight:

Before the Honorable Nathan Clifford, associate justice, and the Honorable John Lowell, district judge.

CHARLES T. WOODMAN, OF BOSTON, IN THE county of Suffolk, and said district of Massachusetts, manufacturer, plaintiff,
vs.
JAMES C. STIMPSON, OF SALEM, IN THE county of Essex, in the State of Massachusetts, and in our district of Massachusetts, tanner & currier, defendant.

In a plea of trespass on the case, for that the plaintiff was the
3 original and first inventor of a certain new and useful machine for ornamenting leather, in the letters patent hereinafter mentioned and fully described, the same being a new and useful "machine for ornamenting leather" which was not known or used before his said invention, and which was not, at the time of his application for a patent as hereinafter mentioned, in public use or on sale with his consent or allowance; and the plaintiff being so as aforesaid the inventor thereof, and being also a citizen of the United States, on the twenty-ninth day of March, in the year of our Lord one thousand eight hundred and sixty-four, upon due application therefor, did obtain certain letters patent therefor in due form of law, under the seal of the Patent Office of the United States, signed by the Secretary of the Interior, and countersigned by the Commissioner of Patents of the United States, bearing date the day and year aforesaid, whereby there was secured to him, his heirs, administrators, executors, or assigns, for the term of seventeen years from and after the date of the patent, the full and exclusive right and liberty of making, using, and vending to others to be used, the said invention and machine, as by the said letters patent, in court to be produced, will fully appear.

And the plaintiff further says, that from the time of the granting to
4 him of the said letters patent, hitherto, he has made, used, and vended to others to be used, the said invention and machine to his great advantage and profit, and the said exclusive right has been and is now of great value to him, to wit, of the value of ten thousand dollars; yet the said defendant, well knowing the premises, but contriving to injure the plaintiff, did, on the first day of June, in the year eighteen hundred and sixty-four, and at divers times before and afterwards, during the said term of seventeen years mentioned in said letters patent, and before the purchase of this writ at Salem, in the county of Essex, in said district of Massachusetts, unlawfully and wrongfully and without the consent or allowance and against the will of the plaintiff, use the said invention and machine, in violation and infringement of the exclusive right so secured to the plaintiff by said letters patent as aforesaid, and contrary to the form of the statutes of the United States in such case made and provided; whereby the plaintiff has been greatly injured and deprived of great profits and advantages which he might and otherwise would have derived from said invention, and has sustained actual damage to the amount of one thousand dollars, and by force of the statutes aforesaid an action has accrued to him to recover the said actual damage, and such additional amount, not exceeding in the whole three times the amount of such actual damages, as the court may see fit to order and adjudge. Yet
5 the said defendant, though requested, has never paid the same or any part thereof to the plaintiff, but has refused and yet refuses so to do, to the damage of the said Charles T. Woodman, as he says, the sum of ten thousand dollars.

The writ in this cause is dated the twenty-eighth day of September, A. D. 1864, and was entered at the October term of this court, A. D. 1864, when and where the parties appeared, by their respective attornies, and, on the seventeenth day of April, A. D. 1865, the following notice was filed, namely:

CHAS. T. WOODMAN }
v.
JAS. C. STIMPSON. }

The defendant in the above-entitled case gives notice, that upon the trial, in addition to all defences admissible under the plea of the general issue, he will produce in evidence special matter tending to prove—

I. That the said Woodman was not the first inventor or discoverer of the things patented to him in the letters patent declared on, or of substantial and material parts thereof claimed as new, but that the same were known to and used by the following-named persons at the following-named places before the invention, if any, thereof by the said Woodman; that is to say, known to Chester Guild, of Somerville, at Roxbury, both in said district; Elijah Holmes, of and at Lynn, in said district; William Tidd, jr., and Charles Tidd, both of and at Stoneham, in said district; John W. Gillian, of Boston, at South Danvers,
6 both in said district; Leonard B. Harrington, of Salem, at Roxbury, both in said district; Jonathan Tidd, of and at Woburn, in said district; N. R. Leman, jr., of Boston, at Charlestown, both in said district; and George Champney, of Natick, at Roxbury, both in said district.

II. That the things patented to the said Woodman in the letters patent declared on, or substantial and material parts thereof claimed as new, were, before the invention thereof, if any, by the said Woodman, described in the following-named letters patent of the government of the United States, and were known to and used by the several patentees below named, at the places of their respective residence as written below; that is to say:

Letters patent granted to Rufus and Henry Brackett, of Boston and of Woburn, both in said district, March 15th, 1845; which is described in volume 11 of the third series of the Journal of the Franklin Institute, page 34.

Letters patent granted to Abel Bayard, of South Reading, in said district, December 29th, 1828; described in volume 3 of the new series of the above-named journal, page 200.

Letters patent granted to Moses Hall, of Charlestown, aforesaid, December 31st, 1817.

Letters patent granted to Robert Eames, (or Emes,) of said Boston, April 20th, and two others on November 21st, 1831; the first described in the said journal, new series, vol. 8, page 164; the others in volume nine, page 320.

Letters patent granted to Jacob Perkins, of said Boston, June
7 26th, 1809; described in said journal, volume 8, new series, page 164, and at page 515, in Arts of Tanning, by Marfet.

Letters patent granted Joseph F. Flanders, of Newburyport, in said district, October 4th 1853.

Letters patent granted R. L. Smith and C. Smith, of Stockport, in the State of New York, January 10, 1860.

Letters patent granted Samuel Cronce, of Flemington, in the State of New Jersey, October 24th, 1848.

Letters patent granted Edward Bookhout and Henry Cochen, jr., of , June 11th, 1850.

Letters patent granted to J. M. Poole, assignor to J. Pasey and Jas. Scott, of Wilmington, Delaware, September 28th, 1852.

Letters patent granted to Fred. Siebert, of Williamsburg, New York, November 29th, 1853.

Letters patent granted to Philip P. Tapley, of Lynn, Massachusetts, January 3d, 1854.

Letters patent granted to N. Ames, of Saugus, Massachusetts, assignor to Samuel Green, of Lynn, Massachusetts, May 1st, 1855.

Letters patent granted to Charles T. F. and John W. Weston, of Salem, Massachusetts, September 25th, 1855.

Letters patent granted to William Crane, of Brooklyn, New York, November 25, 1856.

Letters patent granted to Samuel Green, of Lynn, Massachusetts, March 25th, 1856.

Letters patent granted to Eugene L. Norton, of Charlestown, Massachusetts, May 6th, 1856.

Letters patent granted to T. F. Weston, aforesaid, June 7, 1859.

Letters patent granted to Seward P. Cobb, of South Danvers,
8 Massachusetts, June 5, 1860.

Letters patent granted to Wm. P. Martin, of Salem, Massachusetts, February 28, 1860.

Letters patent granted to Richard A. Stratton, of Philadelphia, Pennsylvania, January 24th, 1860.

Letters patent granted by the government of Great Britain to Wm. Edward Newton, dated February 16th, 1857, and numbered 448 for that year.

Letters patent granted by the said government to John Henry Johnson, dated March 8th, 1858, and numbered 468 for that year.

Letters patent granted by the same government to Messrs. Conlon and Girands, dated October 16th, 1858, and numbered 2,309 for that year.

III. He will also prove that the machines, the using whereof is complained of in this action, were constructed prior to the application of said Woodman for his said patent, and without knowledge or information of the said invention, if any, by said Woodman.

IV. That the things patented to the said Woodman, by the letters patent declared on, were in public use and on sale with his, said Woodman's, consent and allowance more than two years before his application for patent therefor.

V. That the invention patented, in said letters patent declared on, was, before the obtaining of said letters patent, abandoned, to the public, and that said letters patent are void.

9 By his attorneys, S. B. IVES, JR.,
By C. B.

And on the third day of May, A. D. 1865, the following notice was filed, namely:

C. T. WOODMAN
vs.
JAMES C. STIMPSON.

The defendant in the above-entitled case gives notice, that upon the trial, in addition to all defences admissible under the plea of the general issue, and the other matters of which notice has been heretofore given,

he will prove that the things patented to the said Woodman, in the letters patent declared on, or a substantial and material part thereof claimed as new, were, before the said Woodman's alleged invention thereof, known to and used by Edward M. Garnar, now of Brooklyn, in the State of New York, doing business in the city of New York, and by Richard Davis, now of Woburn, Massachusetts, both at the city of New York.

By his att'y, S. B. IVES, JR.,
By C. B.

This cause was thence continued to the May term of this court, A. D. 1865, when, on the fourth day of August, the following notice was filed, namely:

CHARLES T. WOODMAN }
vs.
JAMES C. STIMPSON. }

The defendant in the above-entitled case hereby gives notice, that upon the trial, in addition to all defences admissible under the plea of the general issue, and other matters of which notice has been heretofore given, he will further produce in evidence special matter tend-
10 ing to prove—

I. That the said Woodman was not the first inventor or discoverer of the things patented to him in the letters patent declared on, or of substantial and material parts thereof claimed as new, but that the same were known to and used by the following-named persons at the following-named places, before the invention, if any, thereof, by the said Woodman; that is to say, known to and used by—

George Lane, of and at Charlestown, in said district;
Alexander Mann, of and at Charlestown, in said district;
Benjamin R. Winslow, of Malden, at Charlestown, both in said district;
Jacob Putnam, of and at Salem, in said district;
Charles Bond, of and at Woburn, in said district;
Franklin Tyler, of Salem, at Beverly, both in said district;
Daniel Woodbury, of South Danvers, in said district, at the city and State of New York.

II. That the things patented to the said Woodman, in the letters patent declared on, or substantial and materials parts thereof claimed as new, were, before the invention thereof, if any, by the said Woodman, described in the following-named letters patent of the government of the United States, and were known to and used by the several patentees below named, at their respective places of residence as written below; that is to say—

Letters patent granted to Harvey Paign, of Alexander, in the
11 State of New York, December 23, 1828; and described in volume 3 of the new series of the Journal of the Franklin Institute, page 198.

Letters patent granted to Cushman Bassett, of Boston, in said district, March 25th, 1835; and described in volume 16 of the new series of the above-named journal, page 252.

Letters patent granted to Thomas Chase, of the city and State of New York, September 12th, 1838; and described in volume 24 of the new series of the journal aforesaid, page 158.

Letters patent granted to William Coburn, of Mount Joy, in the State of Pennsylvania, October 31st, 1839; and described in volume 26 of the new series of the journal aforesaid, page 393.

Letters patent granted to John Gardner, of Petersburg, in the State of Pennsylvania, April 25th, 1843; and described in volume 17 of the third series of the journal aforesaid, page 452.

By his att'y, S. B. IVES, JR.,
By C. B.

And on the eighth day of August, the following notice was filed, namely:

C. T. WOODMAN
vs.
J. C. STIMPSON.

The defendant in the above-entitled case gives notice, that upon the trial, in addition to all defences admissible under the plea of the general issue, and the other matters of which notice has been heretofore given, he will prove that the things patented to the said Woodman, in the letters patent declared on, or a substantial and material part thereof claimed as new, were, before the said Woodman's alleged invention thereof, known to and used by Richard Davis- 12 of and at Woburn, in said district; and John Ingham, of and at Wo, burn, in said district.

By his att'y, S. B. IVES,
By G. L. R.

And on the tenth day of August, the following notice was filed, namely:

CHAS. T. WOODMAN
v.
JAS. C. STIMPSON.

The defendant in the above-entitled case gives notice, that upon the trial, in addition to all defences admissible under the plea of the general issue, and to all other matters whereof notice has been heretofore given, he will further produce in evidence special matter tending to prove that the things patented to the said Woodman, in the letters patent declared on, or a substantial and material part thereof, claimed as new, were, anterior to the supposed discovery thereof by the said Woodman, described in the following-named letters patent, granted by the government of Great Britain to the following-named patentees; that is to say, described in—

Letters patent granted to Andon Cederbarg, dated the 28th of February, 1798, and numbered 2,218 for that year.

Letters patent granted to Richard Willcox, dated the 8th of March, 1806, and numbered 2,915 for that year.

13 Letters patent granted to Thomas Jefferson, Joseph Ellis, and Alexander Galloway, dated the 7th of March, 1808, and numbered 3,115 for that year.

Letters patent granted to Luke Hebert, dated the 30th of July, 1808, and numbered 3,158 for that year.

Letters patent granted to Frederick William East, dated the 15th of April, 1851, and numbered 13,589 for that year.

Letters patent granted to Julian Bernard, dated the 13th of November, 1851, and numbered 13,808 for that year.

Letters patent granted to James Nichol, dated the 6th of November, 1852, and numbered 660 for that year.

Letters patent granted to John Andrew Richards, dated the 25th of October, 1855, and numbered 2,391 for that year.

Letters patent granted to Alfred Place, dated the 2d of March, 1858, and numbered 410 for that year.

Letters patent granted to Josiah Vavasseur, dated the 25th of September, 1860, and numbered 2,324 for that year.

By his att'y, S. B. IVES,
Per G. L. R.

This cause was thence continued to the October term of this court, A. D. 1865, when, on the seventeenth day of February, A. D. 1866, the following notice was filed, namely:

C. T. WOODMAN }
vs.
J. C. STIMPSON. }

The defendant in the above-entitled case gives notice, that upon the trial, in addition to all defences admissible under the plea of the general issue, and the other matters of which notice has been heretofore given, he will prove that the things patented to the said Woodman, in
14 the letters-patent declared on, or a substantial and material part thereof claimed as new, were, before the said Woodman's alleged invention thereof, known to and used by Lyman Smith, John E. Smith, and Charles L. Smith, all of and at South Dedham, in said district.

By his att'y, S. B. IVES,
By G. L. R.

This cause was thence continued to the May term of this court, A. D. 1866, when the following pleas are filed, namely:

The defendant comes when, &c., where, &c., and defends the wrong and injury charged, and says he is not guilty thereof in manner and form as said plaintiff has alleged against him, and of this he puts himself upon the country.

By his attorney, STEPHEN B. IVES, JR.

And the plaintiff doth the like by his att'y.

T. L. WAKEFIELD.

Issue being thus joined, the cause, after a full hearing, is committed to a jury, sworn according to law to try the issue, who, after hearing all matters and things concerning the same, return their verdict therein and upon oath say: The jury find that the defendant is guilty in manner and form as the plaintiff hath alleged against him, and assess damages in the sum of four dollars $\frac{17}{100}$.

15 On the sixth day of July, A. D. 1866, a motion for a new trial was filed.

This cause was thence continued to the October term of this court, A. D. 1866, when the same came on to be heard upon the motion for new trial, and was argued by counsel, and the cause was thence continued to the May term of this court, A. D. 1867, when the motion for new trial was overruled.

This cause was thence continued from term to term to this present term, and now, to wit, October 6th, A. D. 1868, it is considered by the

court that the said Charles T. Woodman, plaintiff, recover of the said James C. Stimpson, defendant, the sum of four dollars and seventeen cents, damages, and his costs of suit, taxed at two hundred and fourteen dollars and seventy-five cents.

Upon the trial of the said cause, after the evidence was closed on both sides, and before the issue was submitted to the jury, the said James C. Stimpson, defendant, filed his bill of exceptions; which was sealed and allowed by the court, and is in words and figures following, namely:

Be it remembered that this came on for trial at the May term, 1866. It was an action of trespass in the case brought by the plaintiff, under the statutes of the United States in such case made and provided, against the defendant, to recover the sum of one thousand dollars as actual damages sustained by the plaintiff, and such additional
16 sum, not exceeding in all three times the amount of such actual damages, as the court might see fit to adjudge, by reason of the alleged violation and infringement by the defendant of the exclusive rights granted and secured to the plaintiff by certain letters patent of the United States, whereof a copy is hereunto annexed, marked A, and made a part of this bill of exceptions.

The defendant pleaded the general issue, and issue was joined thereon by the plaintiff.

At the trial the plaintiff produced and read in evidence the letters patent declared on, and the specification thereto annexed and forming a part thereof.

The plaintiff also introduced evidence tending to show that the invention contained in the said letters patent and specification was described and set forth therein with sufficient fullness and accuracy; that it was new and useful; that it had been practised by the plaintiff to his advantage; and that, since the date thereof, leather which had the boarded grain or finish produced thereon by subjecting it to the pressure of a short revolving cylinder of steel or other suitable metal, having the required design or figure engraved or sunk in its periphery, and rolling over a table upon which the leather was placed, substantially in the manner produced by the plaintiff's improvement, had gone into extensive use in the trade.

The plaintiff also introduced evidence tending to show that after the date of the grant to him of the said letters patent, and before the
17 date of the writ aforesaid, the defendant used the invention, or substantial and material parts thereof described in the said letters patent and specification, by the use of a machine for pebbling leather, whereof a model was produced in evidence and marked "3;" and the plaintiff further introduced evidence tending to show the actual damages he had sustained by reason of such use by the defendant; and here the plaintiff rested his case.

The defendant then introduced evidence tending to show that anterior to the plaintiff's alleged invention, and within the United States, the boarded or pebbled grain or finish mentioned in the plaintiff's patent as produced by his improvement, had been produced on leather by subjecting it to the pressure of a short revolving cylinder of steel or other suitable metal, having the required design or figure engraved or sunk in its periphery, and rolling over a table upon which the leather was placed; and that the said revolving figured cylinders, which were also known in the case as "pebbling rollers," were operated with the requisite pressure by means of hand devices produced in evidence and marked

"C," "D," and "E," and were also operated with the requisite pressure in machines known in the case as the "Garnar" machines, whereof a model was produced in evidence and marked "F."

And the plaintiff introduced evidence tending to show that pebbling rollers operated by means of the said hand devices for pebbling
18 leather were of no substantial value for the present purposes of the trade, by reason of the strength required to operate them, and the slowness of the process; that the said hand devices and the said Garner machines were all substantially unlike the plaintiff's said improvement; that they operated in a substantially different manner, and produced a substantially different result.

And the plaintiff also introduced evidence tending to show that the said hand devices like "C," D, and E, were used only upon the flanks of skins that were too soft and loose in texture to admit of being pebbled by boarding in the usual way, for the purpose of giving such parts the appearance of having been boarded; and that such hand devices had not been used since about 1830.

And the defendant introduced evidence tending to show that the said hand devices were also used to pebble whole skins; that they had been used for that purpose since 1830, and as late as 1852; that, whether used solely upon the whole skin, the object of their use was to give a uniform grain to all parts of the leather; and that the pebbled grain produced upon leather by means of the specific device "C" and "E," when applied by hand, and exhibits of which were produced in evidence and marked respectively "K" and "L," could not by practical leather finishers be distinguished from, and were not in fact substantially different from, the pebbled grain produced upon leather by pebbling rollers having the same figure when operated by the plaintiff's said machine or by any other
19 wellk-nown leather-finishing machines.

The defendant also introduced evidence tending to show that anterior to the plaintiff's alleged invention there was known and used within the district of Massachusetts, a machine which, in the substantial combination or arrangement of its parts, co-operating together for the purpose of impressing the surface of the leather, differed in no material respect from the machine described in the letters patent declared on, whereof a model was produced in evidence and marked "4;" except in respect to the mechanism in the plaintiff's said machine for raising and lowering the table, which was left out of view in drawing the comparison, it not being contained in the defendant's machine; and except that instead of operating a short revolving roller like the plaintiff's, having a figured surface, for the purpose of producing the pebbled grain on leather, it operates a short revolving metallic roller, having a smooth surface, for the purpose of giving to the leather a closer natural grain; that this was the only diversity between the two machines, and that having the smooth roller instead of the roller with the ornamental surface, made no difference in the substantial combination or arrangement of machinery co-operating together in said machines for the purpose of doing the work. This machine, whereof a model was produced in evidence and marked "N," was known in the case as the "Green" machine operating the "Smith" roller, which was also produced in evidence and marked "I."

20 The defendant also introduced evidence tending to show that anterior to the plaintiff's alleged invention there were known and used within the United States machines for finishing leather, which differed in their specific construction from the machine described in the plaintiff's patent, as shown in his model thereof, but in which were operated

interchangeably, as occasion required, various short cylindrical tools, both fixed and rotary, for polishing and for figuring leather, which were well known in the trade and previously operated by hand; and that among the said tools was known and used in the said machines, the short revolving metallic roller with figured surface for pebbling leather, substantially the same as the plaintiff's roller.

These machines were the "Garnar" machine, hereinbefore referred to, and a model of the pebbling rollers used therein was produced in evidence and marked "O."

The defendant also introduced evidence tending to show that between the years 1840 and 1850, by the use of three of the said "Garnar" machines intermittently operated with pebbling rollers of steel like the model "O," there were pebbled and supplied to the market, on an average, twenty-five dozen skins per week; that the work done by the said "Garnar" machine operating a pebbling roller, was equally good with the work done by the plaintiff's machine, and that there was no substantial difference in the effect of the two machines respectively upon the leather pebbled by them.

21 And the plaintiff introduced evidence tending to show that the said "Garnar" machines not only differed in construction from the machine described in his patent, but operated in a substantially different manner, and produced a substantially different effect upon the leather; that between the years 1850 and 1860 the said machines had only been occasionally used for pebbling leather, and had since been superseded by other machines; and that the boarded or pebbled grain or finish could be made cheaper and better by the plaintiff's said improvement than by any other machine or instrument known in the trade previous to his invention thereof. And the plaintiff produced in evidence a model of his said pebbling roller, marked "9," and also a skin, marked "2," showing the pebbled finish made by a machine containing the specific construction described and set forth in his said patent.

The defendant also introduced evidence tending to show that the "Green" machine, hereinbefore referred to, was a machine for polishing and figuring leather, well known and commonly used in the trade prior to the plaintiff's alleged invention; that letters patent of the United States were granted therefor to Samuel Green, assignee of Nathan Eames, May 1st, 1855, a copy whereof is hereto annexed and marked "B;" that before the plaintiff's said invention there were operated in the said "Green" machines single short cylinders, which did not revolve except in the case of the "Smith" roller hereinabove referred to, some having a smooth surface for polishing the leather, and some a

22 figured surface for impressing a figure upon the leather by rubbing upon it; that the said "Green" machine operating the said non-rotating figured cylinder, a model whereof was produced in evidence and marked "13," did not otherwise substantially differ from the plaintiff's said machine, apart from the devices for raising and lowering the table; that the substitution in the said "Green" machine of a cylinderical tool which impressed a figure upon the leather by rolling upon it for a cylindrical tool which impressed a figure upon the leather by rubbing upon it, was a matter requiring no invention, but only the common knowledge and skill of a mechanic; that prior to the plaintiff's said invention such a substitution had been frequently made in practice in the "Garnar" machines, by the exercise of only the common knowledge and skill of the workmen employed to operate them; and that the said Green machines belonged to the same class of leather-finishing machines as the said Garnar machines, and were equally adapted to operate interchangeably the same kinds of tools.

And the defendant also introduced evidence tending to show that the machine used by him for pebbling leather, as shown by the model thereof, marked "3," was, in its construction and mode of operation, without reference to the tools employed therein, substantially the same as the machine described and set forth in the said Green patent.

And the plaintiff introduced evidence tending to show that the figuring tool named in the specification of the said Green patent
23 was not a revolving tool, but a rubbing tool, like Exhibit "13;" that the cylindrical tools used for finishing leather by rubbing upon it, were, prior to the plaintiff's said invention, known in the trade as "rollers," whether the same had smooth or figured surfaces; that the adaptation of the pebbling roller to the Green machine, so that the same could be practically used therein, did require invention, and was not within the common knowledge and skill of a mechanic; and that a figured rotating cylinder, such as is described in the plaintiff's patent, had not in fact been introduced and operated in the said Green machine prior to the plaintiff's said invention.

And the plaintiff also introduced evidence tending to show his experiments in procuring the suitable engraving to be made upon his pebbling roller, and in applying the same to the Green machine in such a manner that it would not cut or injure the leather, and would operate upon it with the requisite pressure.

And the plaintiff further introduced evidence tending to show that the said Green machine, with a fixed and sliding roller, was a substantially different machine from the plaintiff's machine, as described in his said patent, and illustrated in his model thereof.

And the defendant further produced in evidence a copy of letters patent of the United Kingdom of Great Britain and Ireland, granted July 30th, 1808, to Luke Hebert, for a machine for polishing, embossing, and graining leather, which was admitted by the plaintiff as a
24 printed publication known in the United States prior to the plaintiff's alleged invention, and which is hereto annexed and marked "C."

And the plaintiff introduced evidence tending to show that the specification and drawings of the said Hebert patent did not describe a revolving roller having the requisite figure engraved on its periphery, nor any use or operation of such roller; that the said machine was substantially unlike the plaintiff's machine in its construction and mode of operation, and produced a substantially different result.

And the defendant introduced evidence tending to show the contrary thereof.

The evidence being closed, and the arguments of counsel having been heard, the defendant prayed the court to instruct the jury—

I. That the first claim of the plaintiff's patent is for boarding or pebbling leather by subjecting it to the action of a short revolving cylinder or roller of steel, or other suitable metal, having the required design or figure engraved or sunk in its periphery, said cylinder or roller rolling with the requisite pressure over a table upon which the leather is placed; and this without reference to the particular means employed for pebbling the roller and giving the requisite pressure; and if the jury find that before the date of the plaintiff's invention leather had been pebbled by subjecting it to the action of such a revolving cylinder or roller, rolling with the requisite pressure over a table on which the leather was
25 placed, whatever may have been the means used of propelling the roller and making the requisite pressure, the plaintiff's patent as to the first claim is void.

But the court refused to so instruct the jury, and did instruct them, as follows, viz:

"Taking the whole description and the claim of the plaintiff's patent together, I am reasonably satisfied, and shall instruct you—though I think it is a little ambiguous in some parts—that the plaintiff does not mean to say, 'I claim a pebbling roller, however it may be used, whether by hand or by any combination of mechanism.' I do not think that is the fair result of the whole patent. The phrase, 'substantially as described,' and, also, I think, the words, 'with the requisite pressure,' are very important, and entitle the plaintiff to say, 'I claim the substantial combination of parts that I have shown, and pressure not merely enough to make the figure, but the requisite pressure to make it right.' It is on this ground that I instruct you that the first claim of the plaintiff's patent is not simply a claim for any mode of pebbling leather by means of a cylinder, but by substantially the means described. It is what is technically called a combination or arrangement of parts, and if the arrangement is new, there may be a patent for that, although each part taken by itself is old."

The defendant also prayed the court to instruct the jury—

II. That if they find that the form of the surface of the roller
26 in the plaintiff's machine is not material to the mechanical action of the roller in combination with the other devices and their arrangements, by which the roller is moved and the leather supported and the pressure made; and that if they find that before the plaintiff's invention a machine was known and used, not differing substantially from the plaintiff's machine in any other respect, but having a roller for giving finish to leather, the surface of which roller was different from that specifically shown and described in the plaintiff's patent; and if they find that before the plaintiff's invention rollers having such a surface as the plaintiff's substantially were known and used in other machines for the same purpose, the plaintiff's patent as to the first claim is void.

But the court refused to so instruct the jury, and did instruct them, as follows, viz:

"If a machine existed before the plaintiff's invention, which was substantially similar to the plaintiff's in all other respects, except that the figure on the roller was different, and even if it cannot be fairly called a pebbling figure, still if it was a figure engraved or cut on the perifery of the roller, and ornamenting the leather in substantially the same way, by substantially the same operation, I do not think there would be any novelty to support the patent. Upon the evidence that prior to the plaintiff's invention, a Mr. Smith put into the Green machine a smooth roller
27 for a purpose which he explained, I instruct you, that if you find that the machine, when so organized, produced in its operation a substantially different result; that is to say, that its effect was entirely different on the leather, then it would not be the same machine as the plaintiff's. The combination would be different as the elements would be different. The roller would be a substantially different roller, and the fact that the form of the roller was in other respects similar would not make the two machines substantially the same; but a mere change in the form of the engraving would not be such a change as would make a substantial difference in the machines."

The defendant also prayed the court to instruct the jury—

III. That if they find that before the plaintiff's invention there was known and used a leather-finishing machine, not differing substantially

from that described and shown in the plaintiff's patent, except in this, that it contained a tool which impressed a figure on the leather by rubbing upon it instead of a tool which impressed a figure on the leather by rolling upon it; and if they further find that before the plaintiff's invention, tools which impressed a figure on the leather by rolling upon it were known and used in machines for the same purpose, differing in other particulars of construction from the machine of the plaintiff, but accomplishing the same kind of result; and if they find that the substitution in the former machine for the rubbing tool of the rotating
28 tool so previously used in the latter machines was a matter calling for nothing but common knowledge and skill of mechanics, such a substitution is not a patentable novelty, and the plaintiff's patent so far as regards the first claim is void.

IV. That if they find that before the plaintiff's invention there was known and used a machine for polishing and figuring leather, not differing substantially from that described and shown in the plaintiff's patent, except that it was used with tools which slid upon the leather, instead of tools which impressed a figure upon the leather by rolling upon it; and if the jury find that tools of various kinds for figuring leather, whether by sliding upon it or by rolling upon it, were, before the plaintiff's invention, known and in use in the trade, whether by hand, or in leather-finishing machines differing in other particulars of their construction from that of the plaintiff, and that the substitution of one tool for another, whether sliding or rolling, in the said prior machines, was a matter requiring nothing more than the ordinary skill and knowledge of a mechanic, then the defendant cannot be restrained by the patent of the plaintiff from using in said prior machine any of the said known tools, whether sliding or rotating, and the plaintiff's patent, as respects the first claim, in so far as it does cover such use by defendant, is void.

But the court refused to so instruct the jury, and did instruct them, as follows, viz:

"If the plaintiff has combined old parts in a new way, so that he
29 gets a machine which operates differently and produces a different result in kind, then the law presumes that he has something that is patentable. The mere question whether any mechanic of ordinary skill could make the combination, if it is suggested, will not do as a general test of the novelty of a machine. If the machines are similar, if they produce similar results, and the question is, whether it is a new combination—whether it is a new arrangement of machinery—then it is very important to know whether any constructor acquainted with one machine could, by his common knowledge and skill, make the other, and work out that result in a somewhat more perfect manner; it is an important test in that sense. It is not a test whether an ordinary mechanic can make the combination if it is suggested, but whether he can make the change by means of his ordinary knowledge, as a means of determining the question, whether there is any new machine at all; that is to say, it is the ordinary knowledge and skill of the mechanic that are in question, not merely the ordinary skill of the mechanic. Thus, if the Garnar machine and the plaintiff's machine are not substantially different, and if the change that was made in the Garnar machine to get it into the plaintiff's machine was a change which any mechanic of ordinary skill—using skill and not invention—could have made on finding that the Garnar machine did not operate quite so well as it should—if it was merely a difference in construction which any
30 mechanic could make—it would be no invention. But if the

parts are substantially different, and were not within the common knowledge of constructors, and the plaintiff has made the new combination, it is no answer to say somebody else found out that bed, or those springs. His patent is not for the bed or the springs alone, if he first combined them—the same parts not differing in themselves—if it was beyond the ordinary knowledge and skill of the mechanic to make the combination, then there is invention in the patent.

"If the essential parts which go to make up the plaintiff's combination or arrangement of machinery have never been combined before, it is no matter that they existed separately in other machines; if, by their combination, a new and beneficial result is produced, or even an old result in a better manner. The question is of the novelty of the combination of the essential parts."

The defendant further prayed the court to instruct the jury—

V. That if they find that the Hebert machine, as shown in the drawings and the corresponding descriptive parts of the specification, contain the plaintiff's combination of mechanism covered by his first claim substantially, except that in that combination a tool which is firmly held and rubs upon the leather is described and shown, then the Hebert specification suggests the substitution for such tool, if desired, of a tool which shall have an ornamental figure engraved upon it, and shall be revolved upon its axis, so as to indent such figure upon the leather. And if the jury find that such is substantially the tool and its operation
31 described in the plaintiff's patent; and if they find that the substitution of such revolving figured tool, in pursuance of said suggestion, in said Hebert patent, required no change in the machine, except such as was within the ordinary skill and knowledge of mechanics, and called for no invention of means of applying said revolving tool, then the Hebert patent anticipates the plaintiff's, and the plaintiff's first claim is void for want of novelty.

But the court refused to so instruct the jury, and did instruct them as follows, viz:

"The question is, did that machine contain substantially the combination and arrangement of parts which the plaintiff claims, and would it do the same work; that is, would it accomplish the same result in substantially the same way. If you find that there are no differences that are material in the operation of the machine, as a machine for pebbling leather, then it supersedes the plaintiff's invention. If you find that it does differ essentially; that the parts and the combination are different, and that it would not operate in the same way to produce the result substantially, then they are different. If there was anything in the language of the patent that was ambiguous, of course, it would be for me to construe it; but it is for you to say what the machine is. If it does not contain any springs to equalize the pressure, or if the spring it contains is substantially different, and one that would not operate to produce the same result in substantially the same way, then the
32 plaintiff's combination is wanting. So of the other parts. If it has not a bed or an arm which is substantially like that of the plaintiff, for the purposes of this arrangement and for accomplishing this result, it would be a different machine—a different combination. That machine in the drawings, as explained by the experts, it is said, does not show any revolving roller. There is a passage towards the end of the patent, in which it is suggested or said that a roller may be used in a certain way for 'dieing or printing.' In other passages cited he describes the tool used distinctly as a rubbing tool. His language is ambiguous and doubtful; but, on the whole, I am of opinion that he meant to say in

that passage that a revolving tool may be used. I think that is the fair import of his language even when it is considered that it is directly contradictory to the other parts of the patent. Assuming that you find that all the parts of the Hebert machine, other than the tool to be operated, are substantially similar to the plaintiff's machine, I instruct you that if the suggestion which the Hebert specification makes of the substitution of a rotary figured tool for a fixed tool, is of itself such a description of the machine that any mechanic of ordinary skill and knowledge could at that moment have made the substitution, there being such a tool in existence and well known; that is to say, if it would be within the ordinary knowledge and skill of a mechanic, who would know
33 what tool was meant and could make it by his ordinary skill, then it would anticipate the plaintiff's patent, but not otherwise. Now whether there was such a tool well known at that time, it is for you to say."

To which refusals and rulings the defendant at the trial took exceptions.

And inasmuch as the matters herein set forth do not appear of record, the same have been reduced to writing, and being found to be correct, this bill of exceptions, at the request of the defendant, is allowed by the court, and directed to be filed as of the twenty-seventh day of June, A. D. 1866, before the jury left the bar.

JOHN LOWELL, [L. S.]
District Judge.

A true record:
Attest: JOHN G. STETSON, *Clerk.*

34 *Exhibit "A."—No.* 42,136.

"A."

The United States of America to all to whom these letters patent shall come:

Whereas C. T. Woodman, of Boston, Massachusetts, has alleged that he has invented a new and useful machine for ornamenting leather, which he states has not been known or used before his application; has made oath that he is a citizen of the United States; that he does verily believe that he is the original and first inventor or discoverer of the said invention; and that the same hath not, to the best of his knowledge and belief, been previously known or used; paid into the treasury of the United States the sum of thirty-five dollars; and presented a petition to the Commissioner of Patents, signifying a desire of obtaining an exclusive property in the said invention, and praying that a patent may be granted for that purpose. These are, therefore, to grant, according to law, to the said C. T. Woodman, his heirs, administrators, or assigns, for the term of seventeen years from the 29th day of March, one thou-
35 sand eight hundred and sixty-four, the full and exclusive right and liberty of making, constructing, using, and vending to others to be used, the said invention, description whereof is given in the words of the said C. T. Woodman, in the schedule hereunto annexed, and is made a part of these presents.

In testimony whereof, I have caused these letters to be made patent, and the seal of the Patent Office to be hereunto affixed.

Given under my hand at the city of Washington, this twenty-ninth day of March, in the year of our Lord one thousand eight hundred and

sixty-four, and of the independence of the United States of America the eighty-eighth.

[L. S.] (Signed) J. P. USHER,
Secretary of the Interior.

Countersigned and sealed with the seal of the Patent Office.
D. P. HOLLOWAY,
Commissioner of Patents.

36 *The schedule referred to in these letters patent, and making part of the same.*

To all whom it may concern:

Be it known that I, C. T. Woodman, of Boston, in the county of Suffolk, and State of Massachusetts, have invented a new and useful improvement in boarding or pebbling leather; and I do hereby declare that the following is a full, clear, and exact description of the construction and operation of the same, reference being had to the accompanying drawings forming a part of this specification, in which

Fig. 1 is a side elevation.

Fig. 2, a perspective view.

Fig. 3, a perspective view (full size) of the pebbling roller removed from the machine, and resting on a strip of leather (*t.*)

Like parts are indicated by the same letters in all the drawings.

What is known as a "boarded" or "pebbled" grain or finish has hitherto been given to leather by what is called the "boarding" operation, which consists in doubling the skin over on to itself on a table, so that the flesh side shall be out, and then forcing or rucking one part over the other in different directions, by means of a flat "corkboard," which breaks or wrinkles the grain, and gives it a rough, checkered, or pebbled appearance. This operation is performed by hand, and is very slow and laborious, and produces only one particular kind of finish.

The nature of my invention, therefore, consists in producing this "pebbled" or "boarded" grain or finish on leather, by subjecting it to the pressure of a short revolving cylinder, or roller, of steel or other suitable metal, having the required design or figure engraved or sunk in its periphery.

My improvement further consists in combining with said roller a certain new and useful combination of mechanical devices for carrying my invention into practical operation, so as to accomplish the object desired with great rapidity and cheapness.

Z (a full-sized perspective view of which is shown in Fig. 3,) is a roller about two inches in diameter and three inches in length. This roller may be made of any suitable metal, though steel is the best, as it may be rendered very hard by tempering. In the periphery of the roller is engraved or sunk any style of figure either such as to produce
37 on leather the "pebbled" surface made by the usual method of "boarding," or any other fancy figure that may be required.

Owing to the varying thickness of different parts of a skin, the roller *Z* should not be more than from three to five inches in length, or else it would fail to bear sufficiently hard upon the thinner portions.

It is obvious that my "pebbled" roller may be combined with various mechanical devices, whereby it can be rolled with sufficient pressure over a skin or piece of leather. I will, however, now describe a combination of devices which I find to answer every purpose required.

C may represent a wooden platform or the floor of a room; and *F* may

be either the top of a frame, supported by the three uprights, *G*, *H*, and *G'*, or it may be the top or ceiling of a room.

A is a wooden table, about four feet and six inches long and five inches wide, the two ends of which slide up and down freely in vertical slots in the uprights *G* and *H*, as shown in Fig. 1. The upper surface of this table, on which the leather to be "boarded" or "pebbled" is placed, is the arc of a circle whose centre is at *J*, at the top of the pendulum *I*. This table when the roller *Z* is going back over it, is lowered and rests on three strips of rubber *W W W*, placed upon the stationary beam B, the extremities of which are framed into the uprights G and *H*. The rubber strips *W* are also designed to prevent noise and jar when the table descends.

Q Q Q Q are two sets of toggle arms, the contiguous ends of which are connected by pivots *e e*, in the forked ends of the connecting arm *R*, as shown in Figs. 1 and 2, the upper ends of the top arms being pivoted at *d d*, to slotted cleats *y y*, attached to the bottom of the table *A*. The two upper arms also pass through slots in the beam *B*, as shown by the dotted lines in Fig. 1. The two lower arms are attached to pivots *f f*, in the slotted cleats *X X*, which are fast to the frame beam *V*. When these toggle-arms are perpendicular, the table *A* will be elevated so that the roller *Z* will rest upon it.

S is an arm of wood or iron, one end of which is pivoted at *l* to the arm *R*, and the other at *k* to the slotted cleat *j*, which (as shown in Fig. 1) is fast to the vibrating arm *T*, the lower end of which is pivoted at *u* to the slotted cleat *v*.

U is an India-rubber or other suitable spring, one extremity of which is attached to the staple *i* in the upright *H*, and the other to the staple *k* in the arm *S;* the object of said spring being to instantly lower the table *A* through the intervention of the arm *S*, whenever the top of the arm *T* is not acted upon by the cam *P* on the periphery of the fly-wheel *O*, which turns on suitable bearings in the upright *G'*.

I is a pendant arm, the length of which may vary, according to circumstances, from four or six feet to any length which the room or building in which the machine is placed may allow. The longer it is the straighter and better will be top of the table *A*. The pendulum *I* swings freely on the pivot *J* at the top; its lower end being provided on each side with iron strips *K K*, as shown in Fig. 2.

D is a wooden arm, the front end of which passes between the strips *K K*, and is connected with them by the pivot *a;* the back end of *D* being connected with the fly-wheel *O* by means of pin *c*, as shown in Fig. 1.

L is a flat strip of metal, as wide as the top of the arm *D* and provided on its under side with two ears *x x*, between which the roller *Z* is placed and in which revolve its journals *b b*.

E E are compressible rubber springs, through whose centres pass the headed bolts *g g*, which, entering the piece *L*, keep it in place. As the bolts *g g* pass freely through holes in *D*, the piece *L* and the roller *Z* will, of course, rise as the springs *E E* are compressed.

M is a connecting rod, one end of which is pivoted to *L* at *m;* the other being fast to the stud *N* in the rear of the arm *D*.

Thus it is obvious that the roller *Z* will bear upon the table *A* during one-half of its orbit, and be raised above it, as in the drawings, during the other half, and that the leather, being placed upon the table *A* and moved along by an attendant as fast as required, will be "boarded" or "pebbled" with great rapidity, cheapness, and in a superior manner.

I do not claim embossing by means of two or more cylinders working together; but what I do claim as new, and desire to secure by letters patent, is—

First. Boarding or pebbling skins or leather by means of a single short cylinder rolling over a table, with the requisite pressure substantially as described.

I also claim raising and lowering the table *A* by means of the toggles *Q*, arm *S*, spring *U*, arm *T* and cam *P*, or their equivalent, substantially as set forth, and for the purpose described.

C. T. WOODMAN.

ELI THAYER.
ELI THAYER, jr. *Witnesses.*

[Here follows drawing marked page 38.]

B.

39 The U. States Patent Office to all persons to whom these presents shall come, greeting:

This is to certify that the annexed is a true copy from the records of this office, of the letters patent granted Sam'l Green, ass'ee of N. Ames, May 1st, 1865. No. 12,806.

In testimony whereof, I, T. C. Theaker, Commissioner of Patents, have caused the seal of the patent office to be hereunto affixed this thirteenth day of October, in the year of our Lord one thousand eight hundred and sixty-five, and of the independence of the United States the ninetieth.

[L. S.] T. C. THEAKER.

40 No. 12,806.

The United States of America to all to whom these letters patent shall come:

Whereas Nathan Ames, of Saugus, Mass., has alleged that he has invented a new and useful improvement in machines for polishing leather & morocco, (he having assigned his right, title, and interest in said improvement to Samuel Green, of Lynn, Mass.,) which he states has not been known or used before his application; has made oath that he is a citizen of the United States; that he does verily believe that he is the original and first inventor or discoverer of the said improvement; and that the same has not, to the best of his knowledge and belief, been previously known or used; has paid into the treasury of the United States the sum of thirty dollars; and presented a petition to the Commissioner of Patents, signifying a desire of obtaining an exclusive property in the said improvement, and praying that a patent may be granted for that purpose.

These are, therefore, to grant, according to law, to the said Samuel Green, his heirs, administrators, or assigns, for the term of fourteen years from the first day of May, one thousand eight hundred
41 and fifty-five, the full and exclusive right and liberty of making, constructing, using, and vending to others to be used, the said improvement, a description whereof is given in the words of the said Ames in the schedule hereunto annexed, and is made part of these presents.

In testimony whereof, I have caused these letters to be made patent, and the seal of the patent office has been hereunto affixed.

Given under my hand, at the city of Washington, this first day of May, in the year of our Lord one thousand eight hundred and fifty-five, and of the independence of the United States of America the seventy-ninth.

[L. S.] ROBERT McCLELLAND,
Secretary of the Interior.

Countersigned and sealed with the seal of the Patent Office.

E. T. SHUGERT,
Act'g Commissioner of Patents.

42 *The schedule referred to in these letters patent, and making part of the same.*

To all whom it may concern:

Be it known that I, Nathan Ames, of Saugus, in the county of Essex, and commonwealth of Massachusetts, have invented a new and useful machine for polishing and figuring moroco, of which the following is a full and exact description; reference being had to the accompanying drawing, letters, and figures.

The figure is a perspective view of the machine, being drawn on a scale of about two inches to a foot.

A A and *B B B B' B' B'* represent the frame, cast in one solid piece of iron. 5 is a wooden block.

C C is a heavy cast-iron fly-wheel, the axle of which, being fast in the wheel, turns in the box *D*.

E is a crank, by which the machine may be operated by hand; or, in place of *E*, a pulley may be used for operating the machine by power.

H H, is a cast-iron arm, swinging freely on the centre of the shaft *I I*, to which it is keyed at *K*, and kept from any lateral motion by the braces *J J*, or by having a wide bearing on the shaft.

F F is a cast-iron arm, one end of it turning on the pin *G* in the wheel *C C*, the other end resting on the pin *L*.

43 *M* is a cap, bolted to *F F*, the pin *L* passing between the two.

O O is a piece of cast-iron, to the lower part of which (*U*) the polishing or figuring tool *R* is fastened in various ways, (or as represented in the figure by the clamp *S*, and the bolt *S' S'* screwed into *U*.)

V is a projection of the arm *F F*, through which, at its lower extremity, a hole is made so large as to admit of the bolt *Q* playing a little, as the ball *R* rises or falls. A nut is screwed on the end of *Q* bearing against *V*.

P is as coil-spring, its upper end bearing against the under side of *F F*, while its lower end rests on a broad nut screwed on a bolt, fast in *O O*, and passing up through the centre of the spring nearly to *F F*. By means of this nut is applied more or less power.

N N are bolts, passing freely through *F F* and screwed into *O O*. The object of these bolts is to raise or lower the ball at pleasure.

T T is an ellipsoidal table, conforming exactly to the orbit described by the ball *R* in the lower half of its revolution.

1, 2, 3, 4 represent a wooden extension of the table *T T*, on which the skin is laid and moved along.

It is obvious that the machine may be driven either by a pulley and belts, or by a person turning the crank *E*; or, as the machine moves with but little friction, it may be driven by the person who holds the skin, he moving the skin along with one hand and pushing the lower end of *H H* with the other.

44 By turning the wheel in the direction indicated by the arrow, it will be seen that in one-half of its revolution the ball *R* will be

raised up from the table *T T*, as represented in the figure, while in the other half *R* will pass as near to the table as may be desired without touching it. So far as the motion and raising of the ball are concerned, it is the same as though the piece to which the ball *R* is fastened were a fixed part of the arm *F F*. Hence it is plain that the ball will be raised in its backward motion, without joint force, friction, or noise. The machine moves as easily and silently as a wheel revolves on its axle and as rapidly as may be desired.

Any of the balls for figuring and polishing in common use are also used in this machine.

Claim.

What I claim as my invention, and desire to secure by letters patent is—

The above-described method of raising the figuring or polishing tool *R*, while passing back over the table *T T*; i. e., by making the tool-holding hand, in effect, a fixed part of the connecting arm *F F*, constructed and combined substantially as described, so that the machine, partaking of the nature of both a reciprocal and rotary motion, may operate without joint noise or friction, as easily and silently as a wheel revolving on its axle and as rapidly as may be desired, and at the same time moving in a uniform ellipsoidal orbit over the table without touching it.

NATHAN AMES.

Witnesses:

A. C. GOODELL.

ELLIOTT C. PIERCE.

Ex'd A. T.

[Here follow drawings marked page 45, No. 1, and page 45, No. 2.]

46 C.

[Stamp: Patent, one shilling, 23, 5, 65.]

[Seal: Commissioners of patents. Inventions.]

[British coat of arms.]

A. D. 1808. . . . . N° 3158.

Polishing, Embossing, and Graining Leather.

HEBERT'S SPECIFICATION.

TO ALL TO WHOM THESE PRESENTS SHALL COME, I, LUKE HEBERT, of the Parish of Saint Stephen, Walbrook, in the City of London, Gentleman, send greeting.

WHEREAS His most Excellent Majesty King George the Third did, by His Letters Patent under the Great Seal of the United Kingdom of Great Britain and Ireland, bearing date at Westminster, the Thirtieth day of July, in the forty-eighth year of His reign, give and grant unto me, the said Luke Hebert, my ex'ors, adm'ors, and assigns, His especial licence, full power, sole privilege and authority, that I, the said Luke Hebert, my ex'ors, adm'ors, and assigns, during the term of years therein mentioned, should and lawfully might make, use, exercise, and vend, within England, Wales, and the Town of Berwick-upon-Tweed, my Invention of "A MACHINE OR AN IMPROVED CONSTRUCTION FOR POLISH-

ING, EMBOSSING, AND GRAINING LEATHER, AND EXTENDING AND FLATTENING THE SAME, AND APPLICABLE TO OTHER USEFUL PURPOSES;" in which said Letters Patent there is contained a proviso obliging me, the said Luke Hebert, by an instrument in writing under my hand and seal, to cause a particular description of the nature of my said Invention, and in what manner the same is to be performed, to be inrolled in His Majesty's High Court of Chancery within one calendar month after the date of the said recited Letters Patent, as in and by the same, relation being thereunto had, may more fully and at large appear.

NOW KNOW YE, that in compliance with the said proviso, I, the said Luke Hebert, do hereby declare that the nature of my said Invention, and the manner in which the same is to be performed, are particularly described and ascertained as follows, that is to say:—

47 A. D. 1808.—N° 3158.

Hebert's Improved Machine for Polishing, Embossing, and Graining Leather.

I do construct and frame together, in a strong and workmanlike manner, a large wheel, represented in Fig. 1, of the Drawings hereunto annexed, by a view of the nature of a vertical section, and in Fig. 2 by a view of the nature of a plan (the said Drawings having been made upon a scale of one inch to represent one foot), and I do fit and apply to the said wheel such other well-known machinery as may be requisite to cause the same, when required, to revolve on its arbor, shaft, or axis by means of any power or first mover which the circumstances or situation of the manufacturer who shall or may make use of the said machinery may afford; and at or about the circumference of the said large wheel, but by preference at the outer ends of the spokes thereof, I do fix certain tools or implements, such as may be fit for acting upon the surface of leather in the several operations herein-before mentioned, or for other useful purposes. And in the manner or method of fixing I do dispose of the acting faces of the said tools or implements respectively in such a manner as that the action shall be performed or effected by a rub or pressure perpendicular or nearly so to the face or plane of the said large wheel (supposed or imagined to be enlarged, if need be), or otherwise, in lines of pressure parellel to the arbor, shaft, or axis of the said large wheel, at the same time that the said tools or implements are carried along by the circular motion. And further, I do place and fix round the said large wheel certain tables, platforms, or supports, upon which the skins of leather are to be disposed during the processes of manufacturing or finishing; and the faces of the said tables are properly disposed and opposed to the faces of the said tools or implements, so that the intended effect shall be duly produced by the action aforesaid. And in order that the pressure may be duly regulated, as well as for other good purposes, I do cause the said tables, platforms, or supports to react against the said tools or implements by the power of a spring or weight, or other yielding force. And I do further declare, that although the said machine and the parts thereof will admit of considerable variety in the dimensions, construction, and position of the same, yet I do prefer that position of the great wheel which requires the plane thereof, and the said tables, platforms, or supports, to be horizontal, and the arbor, shaft, or axis to be upright; and generally that I do prefer such forms, dispositions, dimensions, and applications of the said tools or implements, and of the parts of the said machine, as are delineated in the said Drawings hereunto annexed, and of which the description herein-after given will sufficiently explain the nature and operation.

In Fig. 1 A, A, represents the main shaft. B, B, the pivots. C, the step brass. D, D, D, D, arms, spokes, or radii of the wheel. E, E, &c., rim or ring of the wheel, which may conveniently be made of cast iron. G, G, &c., flanch

of the main shaft for fixing the arms. F, F, &c., braces. H, H, &c., plans of the main shaft for fixing the braces. I, front view of a carriage or frame, in which are disposed a number of tools or implements for working the leather; the said carriage or frame is here shewn as filled with or containing sixteen of the tools called rollers. I, I, perspective views of the said carriage or frame. K, K, &c., edge views of the same. The same letters in Fig. 2 denote the same parts. Fig. 3 shews the form of the chase mortices in the carriages or frames for receiving the screw bolts of the tools. Fig. 4 shews an edge view of the same; and at the lower part is seen one of the rollers securely fastened by the screw bolt in its place. Fig. 5 shews the end of one of the arms, spokes, or radii, upon which the carriage is fixed and screwed fast, and in the state for use. Neither the carriage nor the rollers can have any rotatory motion except that of the large wheel, by which they are carried round; and whenever the lowest roller in the sett which has been in work is required to be changed for another, the center bolt of the carriage is loosened by unscrewing its nut, and the carriage itself turned on its bolt till any other roller that may be wanted is brought to the lowest place, and then the carriage is again fixed by screwing its bolt fast. M, M, &c., Fig. 1, represent the frames of the tables, platforms, or supports. N, N, &c., are front and side views of a cast-iron or other strong frame, capable of being slided up and down like a window frame. It supports the table, which is lifted at the points O, O, O, O, by the treadle of the lever P, P, P, and is limited in its by the stop Q, Q. The table itself, R, R, R, &c., in Fig. 1, and R, R, R, in Fig. 2, is of sufficient dimensions to support the skin; and that half of the surface thereof near which the carriage first arrives in its rotation is slightly inclined, as may be observed in Fig. 1, in order that the tools may act only upon that part of the skin which rests upon the other half of the said surface; and immediately under the plane of action of the tools there is a cast iron or metallic bed, which is shewn separately at S, S, in Fig. 8; and upon the said bed I do apply certain pieces, called table faces, made of hard wood (or may be made of metal), which remain fixed in their places by means of the mortice pieces on the lower surface of the same, which enter into and fit the mortices of the said metallic bed. Fig. 8: the Letters T, T, &c. shew the different sizes of table faces, to be used according to the size and nature of the skin. In Fig. 1 & 2 the letter U shews a piece of leather attached to a steel spring, made fast to the frame V, V, V, where it retains its place while the table may be lowered in order to change the skin when wanted; and the use of the said piece of leather is, to receive the first action of the tool, and to prevent its making too strong and hurtful an impression on the leather at the commencement of its action. But this piece of leather and its spring may be dispensed with if the slope of the table be made to change

its inclination by a very gradual curvature at the place where the action

commences. In Fig. 1 and 2 W, W, denotes a pad soaked in or imbibed with oil for the purpose of oiling the tools as they pass over it, and X, X, denotes a brush which cleans them as they pass. Y is a brush moving along with the carriage, and serving to sweep the skin before the tool comes on. Fig. 7 is the side view of a brush fixed to an iron frame, having an eye at top for receiving the extremity of one of the arms or radii of the great wheel, where the said brush may be fixed instead of one of the carriages, and may be used for scowering of leather with a supply of water or other proper material. Fig. 6 shews a side view of the striking tool. And lastly I do declare, that the operations of polishing, embossing, and graining of leather are effected by the successive action of tools similar to those used in hand work, but fixed, applied, and moved as herein before shewn, for which purpose the skin is shifted as to its situation with regard to the tools at proper periods, which will be easily understood by any workman; and that the dieing and printing is performed in the like manner by a roller properly cut or engraved, which moves round and forms indentations instead of acting by the rub or stroke; and that the extending, flattening, and smoothing (which is technically denominated striking or striking out) of leather, is performed in the same manner as in polishing, &c., but with a tool somewhat sharper than a roller, the same being made of iron or steel, or any other suitable material, and quite plain and smooth on the working edge.

In witness whereof, I, the said Luke Hebert, have hereunto set my hand and seal, the Thirtieth day of August, in the year of our Lord One thousand eight hundred and eight.

LUKE HEBERT. (L. S.)

STEELE. AND BE IT REMEMBERED, that on the Thirtieth day of August, in the year of our Lord 1808, the aforesaid Luke Hebert came before our said Lord the King in His Chancery, and acknowledged the Specification aforesaid, and all and every thing therein contained and specified, in form above written. And also the Specification aforesaid was stampt according to the tenor of the Statute made for that purpose.

Inrolled the Thirtieth day of August, in the year of our Lord One thousand eight hundred and eight.

LONDON: Printed by GEORGE EDWARD EYRE and WILLIAM SPOTTISWOODE, Printers to the Queen's most Excellent Majesty. 1856.

[Here follows drawing marked page 49.]

50 UNITED STATES OF AMERICA, *Massachusetts District, ss:*

I, John G. Stetson, clerk of the circuit court of the United States for the first circuit, Massachusetts district, do hereby certify that the foregoing is a true copy of the record and of all proceedings in the cause of Charles T. Woodman vs. James C. Stimpson, in this court determined

In testimony whereof, I have hereunto subscribed my name and affixed the seal of said court, at Boston, in said district, this twenty-third day of November, in the year of our Lord one thousand eight hundred and sixty-eight, and of the independence of the United States the ninety-third.

[SEAL.] JOHN G. STETSON, *Clerk.*

[5-ct. int. rev. stamp canceled: "J. G. S., Nov. 23, 1868"]

51 The United States of America to Charles T. Woodman, of Boston, greeting:

You are hereby cited and admonished to be and appear at a Supreme

Court of the United States, to be holden at Washington on the first Monday of December next, pursuant to a writ of error filed in the clerk's office of the circuit court of the United States, district of Massachusetts, wherein James C. Stimpson is plaintiff in error, and you are defendant in error, to show cause, if any there be, why judgment rendered against the said plaintiff in error, as in the said writ of error mentioned, should not be corrected, and why speedy justice should not be done to the parties in that behalf.

Witness the Honorable Nathan Clifford, justice of the Supreme Court of the United States, this sixth day of October, in the year of our Lord one thousand eight hundred and sixty-eight.

NATHAN CLIFFORD,
Associate Jus. Sup. Court of the U. S.

The defendant in error hereby acknowledges due and sufficient service of the within citation.

By his att'y, T. L. WAKEFIELD.

52 *Bond on writ of error.*

Know all men by these presents, that we, James C. Stimpson, of Salem, in the State and district of Massachusetts, as principal, and J. H. Safford and William C. Child, both of said Salem, as sureties, are holden and stand firmly bound unto Charles T. Woodman, of Boston, in said State and district, in the full and just sum of five hundred dollars, to be paid unto said Charles T. Woodman, his executors, administrators, or assigns; to which payment, well and truly to be made, we bind ourselves, our heirs, executors, and administrators, firmly by these presents.

Sealed with our seals and dated the sixth day of October, in the year of our Lord one thousand eight hundred and sixty-eight.

The condition of this obligation is such that, whereas lately at a circuit court of the United States holden at Boston, within and for the district of Massachusetts, in a suit depending in said court between said Charles T. Woodman, plaintiff, and said James C. Stimpson, defendant, judgment was rendered against the said James C. Stimpson, and the said James C. Stimpson, having procured a writ of error to remove the said cause to the Supreme Court of the United States, and filed a copy thereof in the clerk's office of the said court, to reverse the judgment in the aforesaid suit, and a citation directed to the said Charles T. Woodman, citing and admonishing him to be and appear at a Supreme Court of the United States, to be holden at Washington the first Monday of December next; that if the said James C. Stimpson shall prosecute his said writ of error to effect, and answer all damages and costs if he fail to make his pleagood, then the above obligation to be void; otherwise to remain in full force and virtue.

J. C. STIMPSON. [L. S.]
J. H. SAFFORD. [L. S.]
WILLIAM C. CHILD. [L. S.]

Witness: GEO. L. ROBERTS.

Approved:

NATHAN CLIFFORD,
Associate Jus. Sup. Court of the U. S.

A true copy of the bond taken by the judge at the time of allowing the writ of error named in said bond which bond is on file in the office of the clerk of the circuit court of the United States, for the first circuit and district of Massachusetts.

Attest:

JOHN G. STETSON,
Clerk U. S. C. C., Mass. Dist.

Supreme Court of the United States.

No. 164.

JAMES C. STIMPSON,

PLAINTIFF IN ERROR,

vs.

CHARLES T. WOODMAN

IN ERROR TO THE CIRCUIT COURT OF THE UNITED STATES FOR THE DISTRICT OF MASSACHUSETTS.

BRIEF FOR PLAINTIFF IN ERROR.

B. R. CURTIS AND GEORGE L. ROBERTS,

OF COUNSEL.

BOSTON:
ALFRED MUDGE & SON, LAW PRINTERS, 34 SCHOOL STREET.
1870.

Supreme Court of the United States.

JAMES C. STIMPSON, IN ERROR, *vs.* CHARLES T. WOODMAN.

BRIEF FOR PLAINTIFF IN ERROR.

THE STATE OF THE ART.

The *grain* of leather is the apparent quality or form of its surface.

The term is generally employed to denote the character of that surface of the skin or hide from which the hair has been removed.

In the case of split leather, however, the term has usual reference to the surface corresponding to the depilated surface of an unsplit skin or hide. Indeed, the term "grain side" is used in contradistinction from the "flesh side."

The natural grain of leather is finer in those parts of the skin or hide which covered the back of the animal than elsewhere.

Artificial grains are produced upon leather by various manipulations of it in the different processes of finishing.

One of the oldest and most important operations to which leather has been subjected in the process of finishing, is that called "boarding," which consists in folding together the grain side of the skin as it lies upon a table, and in forcing it forward upon itself, by means of an implement called a "board," the surface of which is covered with cork or rubber, to enable it to take firm hold of the flesh side of the skin to which it is applied, as explained in the patent of the defendant in error.

The immediate object of this operation of boarding had always been to render the leather soft and pliable, but there has also resulted from it a peculiar grain known as the "boarded" or "pebbled" grain.

Boarding the leather in only one general direction, produces a grain consisting of linear wrinkles and minute ridges nearly parallel to each

other; but boarding it in more than one direction produces a grain consisting of little prominences or papillae, or what is properly known as the "pebbled" grain.

But the grain obtained by boarding is not uniform throughout all parts of a skin or hide, because the flanks being of a looser and coarser texture, do not break up so finely and evenly as the rest of the leather; and though the operation of boarding for the purpose of rendering the leather soft and pliable is still continued as an important and almost indispensable process, yet for the additional purpose of producing a uniform finish throughout the entire surface of the leather, recourse has been had to figuring tools applied with pressure, to imprint thereon the desired grain. Among such tools is the short rotating cylinder, usually of metal, having the required design cut or engraved upon its surface, and known as a "printing roller," or a "pebbling roller," according to the style of the figure contained upon it. For the same general purpose of producing a uniform grain upon leather, extensive use has also been made of short cylinders of wood, stone or metal, that have a figure consisting of fine parallel annular grooves cut upon their surfaces, in planes perpendicular to their axes and that are applied with pressure, in the same manner as the "pebbling" rollers, except that they do not rotate, but imprint their figure by rubbing or sliding upon the surface of the leather.

The Facts that Appear of Record.

The bill of exceptions shows that the defendant below introduced evidence tending to prove, —

First. That anterior to the alleged invention of the plaintiff below, the "pebbling" roller was a well-known currier's tool, operated for the same purpose, and with the same effect, as in the machine described in the patent declared upon, both in the hand devices (C, D and E) and in the Garnar machine (F).

Second. That, in the Garnar machine, such pebbling rollers were used interchangeably, as occasion required, with other figuring rollers that did not rotate, and that such interchangeable use of the rotating and the non-rotating figured rollers in the same machine was set forth and described in the English patent of Hebert.

Third. That the machine (4) patented to the plaintiff below — except

the devices therein for raising and lowering the table, which the defendant below has not used — was fully anticipated, as a leather-finishing machine, without reference to the particular kind of tool used therein, by the machine patented to Ames, May 1, 1855, and known as the Green machine (N); and that the Green machine belongs to the same class of leather-finishing machines as the Garnar machine, and is equally adapted to operate the same kinds of rotating and non-rotating tools interchangeably.

Fourth. That, prior to the alleged invention of the patentee, Woodman, there had, in fact, been operated in the Green machine, not only short non-rotating figured cylinders of agate and of steel, but also a short rotating cylinder of steel, known in the case as the Smith roller (I), which, in its mode of operation, differed in no material respect from the pebbling roller operated in the said Woodman's machine, and differed from it in form only, by having a plain instead of a figured surface.

Fifth. That the substitution, in the Green machine, of a cylindrical tool which impressed a figure upon the leather by rolling upon it, for a cylindrical tool which impressed a figure upon the leather by rubbing upon it, was, at the date of the said Woodman's alleged invention, a matter requiring no invention, but only the common knowledge and skill of a mechanic; that, in fact, such substitution had long before been frequently made in practice in the Garnar machines by the exercise of only the common knowledge and skill of the workmen employed to operate them; and that the machine (3) of the defendant below was in its construction and mode of operation, without reference to the particular tool operated therein, substantially the same as the Green machine.

To sum up: The defendant below showed that long prior to Woodman's alleged invention, the pebbling roller was a well-known currier's tool, effectively used in hand devices and in leather-finishing machines, interchangeably with other figuring tools; that Woodman's machine was fully anticipated by the Green machine, which had been used to operate not only non-rotating figured cylindrical tools but a rotating cylindrical tool differing from the pebbling roller only in having a smooth instead of a figured surface; that the introduction of a pebbling roller into the Green machine was not a matter of invention but of common knowledge

and skill, and that the machine of the defendant below is substantially the same as the Green machine.

The First Ground of Exception.

The first claim of the patent of the defendent in error can be properly interpreted in only one of two ways, viz: either it must be construed to be a claim to the employment of the short metallic roller described, to imprint the desired figure upon leather by causing it to roll with the requisite pressure over a table upon which the leather is placed, without reference to the particular means for propelling the roller or for giving the requisite pressure; or it must be construed to be a claim for the combination of all the mechanical devices described, arranged and operating in the manner described to produce the effect of pebbling leather by a short roller.

In support of the first construction contended for, the language of the specification of the patent clearly indicates that it was the intention of the patentee to describe and claim as his invention the engraved roller and its application to pebble leather, without reference to the means employed. In it he says, —

"The nature of my invention, therefore, consists in producing this 'pebbled' or 'boarded' grain or finish on leather by subjecting it to the pressure of a short revolving cylinder or roller, of steel or other suitable metal, having the required design or figure engraved or sunk in its periphery.

"It is obvious that my 'pebbled' roller may be combined with various mechanical devices whereby it can be rolled with sufficient pressure over a skin or piece of leather.

"What I claim as new and desire to secure by letters-patent, is, *First.* Boarding or pebbling skins or leather by means of a single short cylinder rolling over a table with the requisite pressure substantially as described."

It is true the specification declares "my improvement further consists in combining with said roller a certain new and useful combination of mechanical devices for carrying my invention into practical operation, so as to accomplish the object desired with great rapidity and cheapness"; but this is consistent with his intention to claim the engraved roller as a new invention, and to patent the same as a separate thing,

On the other hand, in addition to the clause last quoted, the patentee further says: —

"It is obvious that my 'pebbled' roller may be combined with various mechanical devices whereby it can be rolled with sufficient pressure over a skin or piece of leather.

"*I will, however, now describe a combination of devices which I find to answer every purpose required*"; and he thereupon proceeds with the description of his entire machine.

Viewed, then, in the light of the entire specification, to which the phrase "substantially as described" may properly refer, the claim in question may be interpreted as calling for all such elements of the described combination as are actually employed to effect the pebbling of leather according to the plan of the patentee.

Silsbee *vs.* Foote, 14 How. 218, 226.
Vance *vs.* Campbell, 1 Fisher, 483, 486; 1 Black, 428, 430.
Prouty *vs.* Ruggles, 1 Story, 568, 572; 16 Peters, 336, 340, 341.
Carver *vs.* Hyde, 16 Peters, 513, 517, 520.

And this construction must include, as essential elements of such combination, the mechanical devices described in the patent of the defendant in error for imparting to the table of his machine the reciprocating movement whereby the leather is alternately withdrawn from and presented to the action of the roller.

1st. Because these elements are described in the specification as important parts of the patentee's machine, having definite and requisite functions therein.

"A is a wooden table about four feet and six inches long, and five inches wide, the two ends of which slide up and down freely in vertical slots in the uprights." "This table, when the roller Z is going back over it, is lowered." "When these toggle arms are perpendicular, the table A will be elevated so that the roller Z will rest upon it."

"Thus it is obvious that the roller Z will bear upon the table A, during one half of its orbit, and be raised above it, as in the drawings, during the other half, and that the leather, being placed upon the table A, and moved along by an attendant as fast as required, will be 'boarded' or 'pebbled' with great rapidity and cheapness, and in a superior manner."

2d. Because the purpose and object of the patentee, as set forth in

his specification, is to pebble a skin with a *short* roller, thereby necessitating the shifting of the position of the skin after each successive passage of the roller across it, which could not be done if the roller remained in continual contact with the leather upon the table, and which is provided for by the devices described for alternately raising and lowering the table.

3d. Because, if it should be held that the patentee does not claim the pebbling roller itself as his invention, the only remaining subject of invention to which his first claim can apply "consists in combining with said roller a certain *new* and useful *combination* of mechanical devices"; and the combination of mechanical devices described in his specification would not be *new* without including the elements of the reciprocating table, and of the mechanism for raising and lowering it, but would be wholly anticipated by the Green machine (patented May 1, 1855), as appears of record.

THE SECOND, THIRD AND FOURTH GROUNDS OF EXCEPTION.

The subject matter of the second, third, and fourth prayers for instruction recited in the bill of exceptions may be conveniently considered together, and we submit that the true construction of the law applicable to this branch of the case is, that *the introduction of an old mechanical device into an old machine in the same mode and for the same purpose that it had been previously introduced into an analogous machine is not a patentable novelty;* that viewed as a combination of old elements it is not *new* within the intent and meaning of the patent law, and that viewed as a process or mode of operation it is only what is known in law as a *double use* of the device on the one hand, and of the machine on the other, and therefore not the subject of a valid patent.

Or to state the proposition of law more concretely:—

The introduction of the pebbling roller into the Green machine in the same mode and for the same purpose that it had been previously introduced into the analogous Garnar machines, is not such a new combination as is patentable, but is rather a double use of the pebbling roller or a double use of the Green machine.

It was therefore proper and material to submit to the determination of the jury in this case the following questions of fact:—

1st. Whether the pebbling roller itself was old and had been used in the Garnar machine.

2d. Whether the Green machine, apart from the pebbling roller, was old.

3d. Whether the Garnar machines, as leather finishing machines, were analogous to the Green machine.

4th. Whether the mode of introduction of the pebbling roller into the Green machine was substantially the same as in the Garnar machines, and was within the common knowledge and skill of mechanics.

5th. Whether the purpose and effect of the use of the pebbling roller in the Green machine was substantially the same as the purpose and effect of its prior use in the Garnar machines, or in the hand devices.

Such, in substance, is what the Court below was prayed to instruct the jury; and if the jury had found all these facts in the affirmative, then the Court should have ruled, as matter of law, that the first claim of the patent of the plaintiff below was void under any construction that did not include as an essential part of the combination therein claimed the mechanical devices for alternately raising and lowering the table, by which alone it is made to differ from the Green machine; and that the defendant below could not be restrained by the patent of the plaintiff below from using the said Green machine, or any other machine substantially like it, for operating the pebbling roller.

This doctrine is uniformly held in England, and it appears to be the settled law of this country, although the decisions upon the subject in our Courts are not so recent nor so numerous as in the English Courts; the obvious reason being that the scrutiny of the United States Patent Office has been so great that patents have rarely issued for supposed inventions of this character, as will be readily perceived by reference to the cases appealed from the Commissioner of Patents.

Cochrane *vs.* Waterman, Law's Dig. 488, § 6.
Hazard *vs.* Green, Law's Dig. 488, § 8.
Rawson, *ex parte*, Law's Dig. 490, § 28.
Wheeler, *ex parte*, Law's Dig. 490, § 29.
Orr, *ex parte*, Law's Dig. 475, § 13.
Blandy, *ex parte*, Law's Dig. 254, § 6; 490, § 23.
Allen, *ex parte*, Law's Dig 254, § 8; 490, § 26.
Marsh, *ex parte*, Law's Dig. 254, § 9; 490, § 27.
Berry, *ex parte*, Law's Dig. 254, § 10.

The case of **Bean *vs.* Smallwood,** 2 Story, 408, 411, raised the question whether the application of certain locking devices to a well-known form of rocking-chair, by means of which the reclining back of the seat could be fastened at any desired inclination, was the subject of a patent; it appearing that such devices were old, and had been applied to purposes of a similar nature in other machines, although not to chairs. Judge Story held that, viewed as a combination of old materials, the chair was not new; and that the addition of the locking devices was merely the application of an old mechanical contrivance to a new purpose, which was not patentable. Such an application he compared to the use of a coffee-mill to grind corn, or to the employment of a steam-engine for the first time to turn the main wheel of a cotton factory, it having been previously employed to turn a grist mill.

Now, the state of facts shown in the case at bar presents a much closer likeness between the two leather-finishing machines, to which the pebbling roller was applied, than between the analogous subjects to which the locking devices were applied, in the case cited, and the rule of law laid down by Judge Story is *a fortiori* applicable to the employment of the roller in the Green machine in the same manner and for the same purpose that it had been previously employed in the Garnar machines.

In the case of **Winans *vs.* Boston & Providence R.R.** 2 Story, 412, 415, the main question in issue was whether the application of axle-boxes outside of the wheels of railway carriages, — the axle being extended beyond the wheels for that purpose, — could be the subject of a valid patent, it being proved that the application had previously been made to other wheeled carriages; and Judge Story held that the patent could not be maintained. To be sure, the question was raised whether the specification did not include other than railway carriages within the invention as claimed; but an examination of the claim itself will make it clear that the decision was rendered upon the ground that under an interpretation of the specification most favorable to the patentee, the invention was not patentable.

But a common wheeled carriage differs quite as much from a railway carriage as the Garnar machine from the Green machine. Indeed, the resemblance between the two comparisons is striking. The Garnar machine, like the common wheeled carriage, was not adapted to be run by steam power; while the Green machine, like the railway carriage,

was so adapted; and, if the combination of projecting axles, and exterior journals and boxes with a railway carriage, was not a patentable novelty, it cannot be held that the combination of the pebbling roller with the Green machine is a patentable novelty.

This brings us to the closely analogous English case of **Losh *vs.* Hague,** Web. Pat. Cas. 202, 207, 208; in which the patent in controversy was for the application of a certain wrought-iron wheel to railway carriages; and, upon the evidence that such wheels had been previously used upon other carriages, Lord Abinger charged the jury as follows: "It is a circumstance to be attended to that Mr. Losh has taken out his patent to use his wheels on railways. Now, he says the wheels made by Mr. Paton, or by the other workmen who were called as witnesses, were never applied to railways at all.

"That opens this question, whether or not a man who finds a wheel ready made to his hand, and applies that wheel to a railway, shall get a patent for applying it to a railway.

"I must own that it strikes me, if you are of opinion this wheel has been constructed according to the defendant's evidence, by the persons who have been mentioned, long before the plaintiff's patent, *that although there were no railroads then to apply them to, and no demand for such wheels,* yet that the application of them to railroads by Mr. Losh, will not give effect to his patent, if part of that which is claimed as a new improvement by him is in fact an old improvement invented by other people, and used for other purposes."

In accordance with such ruling, the jury in the case at bar should have been instructed that if the short metallic engraved roller had been constructed and used in the Garnar machine before Woodman's patent, although there were no Green machines then to apply such rollers to, and no demand for them, yet the application of them to the Green machine by Mr. Woodman, would not give effect to his patent.

But the Court below was not asked to lay down the law so broadly. The prayers for instruction left it to the jury to find not only that the roller was old, and that it was used in the prior Garnar machine to produce the same result, as when subsequently used in the Green machine; but also that it was used interchangeably with fixed tools in the Garnar machine, and that its substitution for such fixed tools, both

in the Garnar machine and in the Green machine, was within the common knowledge and skill of mechanics.

On the other hand, in Losh *vs.* Hague the Court ruled in substance that for the purpose of the application of the particular wheels in question, there was no difference between a common road carriage and a railway carriage, and that the substitution of the wheel in question for other kinds of wheels in the one carriage or in the other, was within the common knowledge and skill of mechanics.

But the case of **Harwood *vs.* Great Northern Railway,** 11 H. of L. Cas. 654, 667, 673, 682, 684, settled the law upon this point more fully and with greater precision than any other case to be cited. The doctrine was laid down in the Exchequer Chamber, and affirmed in the House of Lords, that "*a mere application of an old contrivance in the old way to an analogous subject, without any novelty or invention in the mode of applying such old contrivance to the new purpose, is not a valid subject-matter of a patent.*" (See same case in 9 Ch. Cls. 2 Best & Smith 222, 224 et seq.)

The particular subject-matter of the patent in question, in that case, was the application of a grooved plate — known as a "fish" — to the sides of two contiguous rails of a railway for the purpose of binding together their abutting ends; and it was held to have been anticipated as a patentable novelty by the previous application of a channelled iron plate underneath the abutting ends of two contiguous bridge timbers, the purpose served by each being to resist vertical strain and to receive the heads of the bolts into the grooves or channels.

"The question is," said Lord Chancellor Westbury, "whether there can be any invention of the plaintiff in having taken that thing which was a fish for a bridge and having applied it as a fish to a railway. Upon that I think the law is well and rightly settled, for there would be no end to the interference with trade and with the liberty of adopting any mechanical contrivance, if every slight difference in the application of a well-known thing should be held to constitute ground for a patent. It would be an idle thing, if it were possible, to take a well-known mechanical contrivance, and, by applying it to a subject to which it has not hitherto been applied, to constitute that application the subject of a patent to be granted as for a new invention." (p. 682.)

And, though some of the Judges were of the opinion that the facts in the case showed substantial differences between the structure and uses

of the channelled iron plate and the grooved fish, yet the principles of law laid down were not only unquestioned, but firmly maintained by Mr. Justice Blackburn, who delivered the dissenting opinion. "In every case," said he, "arises a question of fact whether the contrivance before in use was so similar to that which the patentee claims, that there is no invention in the differences, if any, between the old contrivance and that for which the patentee claims a monopoly; and if there is none, there arises a further question of fact, viz: whether the purpose to which the contrivance was before applied and the new purpose are so analogous or cognate that there is no discovery or invention in the new application." (p. 667.)

But the questions of fact specified by Mr. Justice Blackburn, in the case just cited, were, in the case at bar, included in the second, third and fourth prayers for instruction, as essential matters to be left to the jury. They were to find whether the pebbling roller itself was old and well known, and whether its uses in the Garnar machine were not only closely analogous, but the same as its uses when applied in the Green machine. We submit, however, that it would have been proper for the Court to have ruled even more favorably in behalf of the defendant below, than was prayed for, and that the jury should have been instructed that, if they found the pebbling roller to be old, it was not necessary to find that it had been used in prior machines for the same identical purpose that it was used for when first operated in the Green machine, but that the jury might find whether the analogy between its prior use and its new use was so close as to require no invention to make the change, but only common knowledge and skill of mechanics.

In the language of Lord Chancellor Chelmsford, in the more recent case of Penn *vs.* Bibby, L. R. 2 Ch. Ap. 136: "In every case of this description, one main consideration seems to be whether the new application lies so much out of the track of the former use as not naturally to suggest itself to a person turning his mind to the subject, but to require some application of thought and study."

That there is a limit to patentable invention, in the contrivance of new combinations of mechanical elements, cannot be disputed, and each case of this kind has its own peculiar questions of fact. For if, in the case cited, — Harwood *vs.* Great Northern Railway, — Mr. Justice Black burn was correct in his opinion that the application of the grooved fish

in the Garnar machine and in the Green machine, was within the common knowledge and skill of mechanics.

On the other hand, in Losh *vs.* Hague the Court ruled in substance that for the purpose of the application of the particular wheels in question, there was no difference between a common road carriage and a railway carriage, and that the substitution of the wheel in question for other kinds of wheels in the one carriage or in the other, was within the common knowledge and skill of mechanics.

But the case of **Harwood *vs.* Great Northern Railway,** 11 H. of L. Cas. 654, 667, 673, 682, 684, settled the law upon this point more fully and with greater precision than any other case to be cited. The doctrine was laid down in the Exchequer Chamber, and affirmed in the House of Lords, that "*a mere application of an old contrivance in the old way to an analogous subject, without any novelty or invention in the mode of applying such old contrivance to the new purpose, is not a valid subject-matter of a patent.*" (See same case in Exch. Ch. 2 Best & Smith 222, 224 et seq.)

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"The question is," said Lord Chancellor Westbury, "whether there can be any invention of the plaintiff in having taken that thing which was a fish for a bridge and having applied it as a fish to a railway. Upon that I think the law is well and rightly settled, for there would be no end to the interference with trade and with the liberty of adopting any mechanical contrivance, if every slight difference in the application of a well-known thing should be held to constitute ground for a patent. It would be an idle thing, if it were possible, to take a well-known mechanical contrivance, and, by applying it to a subject to which it has not hitherto been applied, to constitute that application the subject of a patent to be granted as for a new invention." (p. 682.)

And, though some of the Judges were of the opinion that the facts in the case showed substantial differences between the structure and uses

of the channelled iron plate and the grooved fish, yet the principles of law laid down were not only unquestioned, but firmly maintained by Mr. Justice Blackburn, who delivered the dissenting opinion. "In every case," said he, "arises a question of fact whether the contrivance before in use was so similar to that which the patentee claims, that there is no invention in the differences, if any, between the old contrivance and that for which the patentee claims a monopoly; and if there is none, there arises a further question of fact, viz: whether the purpose to which the contrivance was before applied and the new purpose are so analogous or cognate that there is no discovery or invention in the new application." (p. 667.)

But the questions of fact specified by Mr. Justice Blackburn, in the case just cited, were, in the case at bar, included in the second, third and fourth prayers for instruction, as essential matters to be left to the jury. They were to find whether the pebbling roller itself was old and well known, and whether its uses in the Garnar machine were not only closely analogous, but the same as its uses when applied in the Green machine. We submit, however, that it would have been proper for the Court to have ruled even more favorably in behalf of the defendant below, than was prayed for, and that the jury should have been instructed that, if they found the pebbling roller to be old, it was not necessary to find that it had been used in prior machines for the same identical purpose that it was used for when first operated in the Green machine, but that the jury might find whether the analogy between its prior use and its new use was so close as to require no invention to make the change, but only common knowledge and skill of mechanics.

In the language of Lord Chancellor Chelmsford, in the more recent case of Penn *vs.* Bibby, L. R. 2 Ch. Ap. 136: "In every case of this description, one main consideration seems to be whether the new application lies so much out of the track of the former use as not naturally to suggest itself to a person turning his mind to the subject, but to require some application of thought and study."

That there is a limit to patentable invention, in the contrivance of new combinations of mechanical elements, cannot be disputed, and each case of this kind has its own peculiar questions of fact. For if, in the case cited,—Harwood *vs.* Great Northern Railway,—Mr. Justice Black burn was correct in his opinion that the application of the grooved fish

plate to a railway was a patentable novelty, the further question might arise in another case whether the application of this same kind of fish to what are known as single tee (T) rails would prevent a valid patent for its further application to what are known as double tee (I) rails; a question which we believe the courts of this country, as well as those of England, would answer emphatically in the affirmative, although it is a well-known fact that the double tee rail is greatly superior to the single tee rail, and possesses even patentable differences.

We submit, then, that though the Green machine may have differed from the Garnar machine in important particulars of construction, and may have been more effective, yet, that if the pebbling roller was first introduced into the Green machine by means substantially the same as had been previously used to introduce it into the Garnar machine, and if, when introduced into the Green machine, it was operated therein to produce the same kind of work that it had previously produced when operated in the Garnar machine, *the fact of the superior organization of the Green machine cannot be held to contribute to the novelty of the introduction of the pebbling roller therein.*

This position will be seen to be stronger if we consider the results of a contrary doctrine.

There are several different kinds of leather-finishing machines now in use, adapted to operate the same kind of tools, both fixed and rotary, which were long since operated in the Garnar machine.

Each of these subsequent leather-finishing machines presents certain peculiarities of structure or mode of operation, for which, in the majority of cases, patents have been granted. Now, if it were held that the combination of the pebbling roller with the Green machine was a patentable novelty, if the Green machine presented substantial differences of construction when compared with the Garnar machine, each being considered apart from the tool operated therein, then it would follow that, even after the pebbling roller had been used in the Green machine, its introduction for the first time into either of the other leather-finishing machines, presenting certain patentable differences in their specific construction, when compared with the Green machine, would be an additional patentable novelty, although nothing more was done in each case than to use the old means of application and to produce the old result of pebblin

leather. The absurdity of such a construction of the law relating to novel mechanical combinations is too manifest to require comment.

The case of **Regina *vs.* Cutler** 3 Car. & Kir. 215, 228, 230, 234 brought to annul the defendant's patent on the ground that there was no patentable novelty in the invention described therein, raised the same question as the cases already cited. The third claim of the patent was as follows: "I claim the application of either iron or steel tubes, when coated with copper, brass, or other alloys of copper, in the construction of tubular flues for steam boilers"; and Lord Denman, C. J., in summing up to the jury, said: "With regard to the third of those claims, in which the defendant Cutler claims the application of tubes in the construction of tubular flues, it appears to me that he has no right to take out a patent for the mere application of particular things to any particular purpose. *If he had made a new combination, that might have been a new discovery and a proper subject for a patent;* but I think Lord Abinger's illustration is a striking one and applicable to the present case, — it is like sweeping a carpet of a new manufacture with an old broom.

"If he had introduced a new article which required the application of a new principle to the production of it, it might have formed a subject for a patent; but the mere application of a thing which existed before does not appear to me to be a subject for a patent.

"And in general terms I think that *the application of an article to produce any particular result, the party having no claim either to the mode of producing the article or to the mode of applying it for attaining that result, forms no ground for a patent.*

"It appears from the specification, and indeed is admitted by the defendant, that the coated tubes mentioned in the specification are not new, and I think, therefore, that the third part of the invention which is claimed in this specification cannot be made the subject of a patent."

So clear and decided was the Court in reference to the law applicable to the facts in this case, that after consideration by the full bench the jury were directed to find their verdict for the Crown. It being admitted in the defendant's patent that copper-coated iron tubes were not new, the Court did not recognize any other facts as necessary to be found in the case. No question was raised for the determination of the jury, whether the form of the surface of the coated tubes was or was not

material to the mechanical action of the steam boiler into which they were put, either in relation to the water or to the fire. It was not considered material to inquire whether the presence of the copper-coated tubes resisted corrosion or conducted heat better than tubes not so coated. Such tubes were well known, and their particular functions or aptitudes were well known, and the Court did not deem it to be a patentable application, *or a patentable combination* because they were used in a new place to serve the same office that they had elsewhere served.

In the case at bar, however, the second prayer for instruction to the jury included just the very question that the Court in Regina *vs.* Cutler thought it not necessary to submit to the jury. We doubt not that in addition to finding that the pebbling roller was itself old, it would have been sufficient for the jury to have found that prior to the alleged invention of Woodman, the Green machine was used by Mr. Smith to operate a short rotating metallic cylinder which differed in no respect from the pebbling roller except that it had a smooth instead of a figured surface, and that the Court should have instructed the jury that if they did so find, then their verdict must be for the defendant below, because the mere presence or absence of a figure upon the surface of the roller would not change the character or the mode of operation of the machine, and would not be a patentable novelty.

But the case of Regina *vs.* Cutler did not raise the question in issue so narrowly as the case at bar. In order to render the two cases strictly homologous, it should have appeared that the copper-coated tubes had been previously used in other kinds of steam boilers than in the particular kind shown in Cutler's patent, and the fact that the pebbling roller had been used in machines of the same kind, though differing in details of construction prior to its use in the Green machine furnishes stronger reasons why the Court should have ruled more favorably for the defendant below in the case at bar.

The case of **Parkes *vs.* Stevens,** L. R. 8 Eq. 358, 366, 368, raised the question whether the application to a spherically shaped lantern, of a sliding door having the shape of a spherical section or lune, was a matter for the grant of a patent, it being in evidence that the globular lantern used by the defendant was old, that hinged doors of the same shape had been previously applied to globular lanterns and that sliding doors

having the form of a cylindrical section had been previously applied to cylindrically-shaped lanterns. Referring to this feature of the case the Vice-Chancellor said: "But I am clearly of opinion that there can be no patent right in the substitution of a slide for a hinge, whether applied to the door of a house or the door of a carriage or the door of a lamp or lantern, whether large or small, suspended or not suspended." p. 368. And the same view was taken by the Lord Chancellor on the appeal. L. R. 5 Ch. Ap. 36, 39.

Now the case at bar presents precisely the same questions as the case just cited. Globular lanterns, like the Green machine, were old. Lunar shaped doors applied with a *hinge* to globular lanterns were old, in the same manner that figured cylinders applied with a *clamp* to the Green machine were old. Sliding doors had been long before applied to cylindrical lanterns as pebbling rollers had been long before applied to Garnar's leather-finishing machines; and as the substitution in a globular lantern of a sliding door for a hinged door was held to be not a matter of invention, so the substitution in the Green machince of a figured cylinder that is hung to rotate therein, for a figured cylinder that is clamped to rub therein, is obviously within the same rule; and the jury should have been instructed as prayed for in the third and fourth prayers set forth in the bill of exceptions.

The caseof **Jordan *vs.* Moore,** L. R. 1 C. P. 624, 635, is also in point, although it does not present a state of facts so closely resembling the facts in the case at bar, as is presented by the cases already cited. The patentee claimed "the construction of ships and other vessels that navigate on water with an iron frame combined with an external covering of timber planking for the sides, bilges and bottoms"; and the Court held that it was not the subject of a patent.

Mr. Justice Byles, in delivering the opinion of the Court, said: "It is not only the substitution of one well-known and analogous material for another, that is wood for iron, to effect the same purpose, on an iron vessel, but it is the application of the same old invention, viz: planking with timber, which was formerly done on a wooden frame, to an analogous purpose, or rather to the same purpose, on an iron frame."

Nevertheless, it was not disputed that the combination claimed in this case was technically a new combination, or that the iron frame was

superior to the prior wooden frame, but the analogy between the new and the old combination and uses was too strong to admit of any substantial novelty.

The question is still as to the degree of resemblance between the old thing and the new, whether the new subject is produced by a change of material or by a change of structure.

See, also, **Horton *vs.* Mabon,** 12 C. B. (N. S.) 437, 450; 16 C. B. (N. S.) 141.

For this reason the law enunciated in the case of **Hotchkiss *vs.* Greenwood,** 11 How. 248, 264, is applicable to the case at bar.

The state of facts there presented was, that a knob of potter's clay was applied to or combined with its shank and spindle, by means of a dove-tailed cavity and an infusion of melted metal; it being in evidence that knobs of metal and wood had been previously applied to or combined with the same kinds of shank and spindle in the same way. And it was held that such a substitution of one well-known material for another was not patentable, although there might be utility and a certain degree of novelty attained.

But there is another point of view from which this decision may be considered in reference to the facts adduced. If we regard the shank and spindle, either of themselves, or in connection with the door locks, of which they formed a part, as a certain machine, or combination of mechanical devices, arranged to hold and to operate with the various knobs attached to them, then it is plain that the substitution of a clay knob for a metal knob in connection with such mechanical devices would not change the character or the mode of operation of those devices, but would simply put them to a double use.

And so in the case at bar; if the smooth roller used by Mr. Smith and the figured roller described in the Woodman patent, when considered as leather-finishing tools, to be applied with pressure to leather, to impress upon it their particular forms of surface, present no greater differences than the metal knob and the clay knob, when considered as separate devices to contribute each its own peculiar characteristics and aptitudes to the door handle of which it formed a part, then the employment of the Green machine to operate the figured roller was no more a patentable novelty than the employment of the old shank and spindle to carry

the clay knob. And in order to determine whether such employment of the Green machine was merely a double use, it was competent for the jury to find that the form of the surface of the roller was not material to the mechanical action of the machine; and the Court below should not have refused to instruct the jury in accordance with the second prayer recited in the bill of exceptions.

In the case of **Kay *vs.* Marshall,** 5 Bing. N. C. 492, 499, and 8 Cl. & Fin. 245, 256–261, it was decided that the use of a cotton spinner to spin macerated flax at short reach was not patentable.

In the case of **Brook *vs.* Aston,** 8 El. & Bl. 478, 485, and 1 El. & El. 1102, it was held that the application of a machine for polishing cotton or linen thread to the new purpose of burnishing yarns of wool or hair was not the subject of a patent.

The same doctrine was laid down by Judge Story in the case of **Howe *vs.* Abbott,** 2 Story, 190, 193, 194, where the question in issue was whether there was any patentable novelty in twisting and curling palm leaf for mattresses and cushions, by the same process that had previously been used in twisting and curling hair for the same purpose. "It is precisely the same," says the Court, "as if a coffee-mill were now for the first time used to grind corn. The application of an old process to manufacture an article to which it had never before been applied, is not a patentable invention. There must be some new process, or some new machinery used to produce the result. If the old spinning machine to spin flax were now first applied to spin cotton, no man could hold a new patent to spin cotton in that mode, much less the right to spin cotton in all modes, although he had invented none."

See, also, Phillips *vs.* Page, 24 How. 164, 167.
Bush *vs.* Fox, 5 H. of L. Cas. 707, 715–716.
Bottle Envelope Co. *vs.* Seymer, 5 C. B. (N. S.) 164, 171.

Now, we submit that the use of the Green machine, to operate any leather-finishing tool which it was capable of operating upon leather or analogous material, was only a repetition of the same use, and that unless the tool itself was new, there could not arise a patentable change in using that machine to the extent of its capacity. The tool itself may be

considered as the thing operated upon in this connection; and it surely cannot be maintained that there is any greater intrinsic differences between a rotating metallic cylinder with a figured surface, and one with a smooth surface, than there is between cotton and flax, linen thread and woollen yarn, hair and palm-leaf, or coffee and corn, in the cases cited.

The doctrine that the owner of a machine has the right to use it to the extent of its capacity, notwithstanding another may have discovered how to use it more beneficially, or succeeded in bringing out some new capability, is further elucidated by the case of **Ralston *vs.* Smith,** 11 H. of L. Cas. 223, 246, 251, 253, which is summed up as follows by Lord Chelmsford: —

"The claim is for the invention of a process by which, by means of rollers and bowls, the rollers having grooves, flutes or indentations around them, and revolving with greater velocity than the bowls, the embossing of patterns on fabrics and adding a finish or lustre to them may be effected by one single operation.

"Before the patent an engraved roller and a bowl had been used with equal surface speed for embossing. For the process of calendering, two rollers, or a roller and a bowl, had been employed, having different surface speeds; and circular grooves for embossing had also been in use.

"There was, therefore, nothing new in the process of embossing with pattern rollers, and nothing new in giving a differential speed to the roller and bowl, for the purpose of producing a gloss or finish, nor in the employment of circular grooves."

"The plaintiff does not claim to have invented any new combination of machinery, although by part of the title of his patent, which he afterwards disclaimed, he appears originally to have considered that he was an inventor in this sense; nor has he introduced to the world any new process; but the utmost that he can lay claim to is, that he has discovered that by giving a differential motion to different parts of an old machine, a power existing in it might be developed and brought into action. It appears to me, that such a discovery is not the subject of a patent. pp. 255, 256.

In the light of the decision in the case just cited, a further aspect of the case at bar is brought out. If the figured steel roller referred to in

the bill of exceptions, and marked "13," had been allowed to rotate upon its own axis in the Green machine, it would have been brought within the category of short rotating figured cylinders of metal operated as described in the patent of the defendant in error. Now, all the change required for this purpose would be to relieve the roller from the friction of the clamps by which it is prevented from rotating; and not only was it competent for the jury to find whether such a change was within the ordinary knowledge and skill of a mechanic, in accordance with the instructions asked for in the fourth prayer, but it is within the scope of the judicial authority of the Court itself to say whether such a change is not within the legitimate uses and capacities of the Green machine, and within the contemplation of the original contriver of it, especially when considered in connection with the patent which appears of record in this case, marked "B."

We cannot better close this branch of the subject, than by quoting the language of Mr. Chief Justice Erle, in the above cited case of Ralston *vs.* Smith, 9 C. B. (N. S.) 149: —

"We also observe that a patent for the exclusive right to one particular use of a known machine, might be objected to. Although the patentee may have discovered how to use the machine more beneficially than the owner knew, he had no right to take a grant which virtually prohibits the owner from an existing right over his own property. Here the defendant had a right to use any relative speed for his roller and his bowl, to feed in any kind of cloth, in any direction, either at right angles or transversely, and with or without a pattern on his roller, before the date of the patent. Then can a patent be granted which, in effect, prohibits him from some use of that machine more beneficial than he had found out?"

See, also, Tetley *vs.* Easton, 2 C. B. (N. S.) 706, 739, 740.

The Fifth Ground of Exception.

The fifth ground of exception is, that the instruction of the Court below to the jury was such a qualification of the instruction prayed for as ought not to have been introduced, and we submit that it was enough for the jury to find that the Hebert patent taught the use of figured revolving tools generally, in a machine substantially like the plaintiff's, to authorize either Hebert, or any one claiming under him or the public,

after the expiration of his patent, to use in it any revolving figured tool, although subsequently invented, subject only to the claims, if any, of such subsequent inventor of the new figured tool; it being one of the facts included in the prayer that such substitution required no change in the machine except such as was within the ordinary skill and knowledge of mechanics.

Betts *vs.* Neilson, L. R. 3 Ch. Ap. 434.

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No. 764.

No. 64.

SUPREME COURT OF THE UNITED STATES.

IN ERROR TO THE CIRCUIT COURT OF THE UNITED STATES,

For the District of Massachusetts.

JAMES C. STIMPSON, PLAINTIFF IN ERROR,

vs.

CHARLES T. WOODMAN.

DEFENDANT'S BRIEF.

T. L. WAKEFIELD,

For the Defendant in Error.

SUPREME COURT OF THE UNITED STATES.

No. 164.

IN ERROR TO THE CIRCUIT COURT OF THE UNITED STATES,

FOR THE DISTRICT OF MASSACHUSETTS.

JAMES C. STIMPSON, Plaintiff in Error, vs. CHARLES T. WOODMAN.

BRIEF OF DEFENDANT IN ERROR.

I.

The first alleged error is the construction given by the Court to the specification and claim in the patent, viz.: That the patent is for a *combination*, as described in the instructions, and not for the *roller* alone, however it might be operated, as stated in the prayer.

1. The construction of the patent so given was not erroneous.

(1.) Patents are to be construed liberally in favor of the patentee; so construed, if possible, that the inventor shall have the benefit of what he has actually invented, if he has invented anything.

Corning *v.* Burden, 15 How., 269, 270.
Pitts *v.* Whitman, 2 Story, 621.
Carver *v.* Braintree Man. Co., 2 Story, 446.
Ames *v.* Howard, 1 Sum., 485-6-7.
Ryan *v.* Goodwin, 3 Sum., 520.

A careful analysis of the specification shows that the invention does not consist in the identical devices used, but in a practicable and described mode of effecting certain operations,

what those operations are, and one practicable mode of effecting them; and the patent is for an improvement in ornamenting leather, describing the means, and containing two distinct claims.

1. The *one* pertaining to raising the table so as to produce the contact between the *roller* and the *bed* on which the skin rests when the pebbled impression is made, which is not in controversy in this suit.

2. The *other* consists in *combining* a short metallic roller, having the required figure engraved upon its periphery, with the propelling and operating machinery, substantially as set forth in the specification, whereby the roller, at the end of the radial arm, is brought in contact with the table of a curvature corresponding to the arc described by the roller in its vibrations, on which the leather is placed for pebbling, and is rolled over the leather with suitable pressure to produce the required impression upon the leather.

This last-named improvement is the only one in controversy in this suit.

The specification states —

1st. That the "invention is a new and useful improvement in boarding or pebbling leather."

2d. Describes the drawings.

3d. Describes how the "boarded or pebbled grain or finish" had previously been given to leather.

4th. Describes the nature of the invention in two leading parts, viz: —

(1.) Describes the *roller*.

(2.) He says: "My improvement further consists in combining with said roller a certain new and useful combination of mechanical devices for carrying my invention into practical operation so as to accomplish the *object desired* with great rapidity and cheapness."

After a suggestion of various combinations by which "*sufficient pressure*" can be obtained,

he then describes more fully the various parts or elements of the combination, substantially the same as in the infringing machine of the defendant.

Finally, the *claim* sets forth the *purpose* of the invention, and the described *means* of effecting it, viz.: "What I do claim as new, and desire to secure by letters patent is, first boarding or pebbling skins or leather by means of a single short cylinder rolling over a table, with the requisite pressure substantially as described."

Hence, the patent is for the *combination*, operating in the mode and effecting the purpose described in the patent, and not for the roller only. No question is made of the substantial identity of the infringing machine with the plaintiff's machine.

II.

The second alleged error involves this question, when applied to the assumed facts, viz.: Assume that, prior to the plaintiff's invention, the Green machine was constructed, and operated substantially like the plaintiff's machine, except it had a smooth roller, like the one used by Smith to polish and make smooth the surface of the leather, instead of the engraved roller, like the one used in the plaintiff's machine, to impress upon the leather the pebbled grain or finish; and assuming that, before plaintiff's invention, rollers having a surface substantially like the plaintiff's were known and used in other machines for the same purpose, like the *hand roller* or Garner machine, was the *combination* of the Green machine with the engraved revolving roller a *patentable invention?*

(*a.*) As the prayer does not assume it found by the jury that no improved effect is produced upon the leather, and at a cheaper rate, by this new combination constituting the plaintiff's machine, the Court, in instructing the jury, must have assumed that such was the fact, according to the evidence, or that it was assumed for the jury so to find.

Hence, the instruction sought by this prayer must be given, on the assumption that such better and cheaper effect would be produced by the plaintiff's machine, — the new combination, — or else the effect was intended to be disregarded, which would be fatal to the prayer.

If this prayer intended to *exclude* a consideration *of the effect produced by such combination*, the instruction sought could not be given for the want of so essential an element.

If it intended to *include* the assumption of such effect, then the instruction could not be given, because a palpable violation of the law.

1. A patent for a combination of elements or parts previously known in a machine is valid, if the result produced by such combination is either a new article, or a better article, or a cheaper article to the public — either an old effect, better or cheaper, or a new one.

Curtis, p. 67, 79, 81, 84–5, also 24.
Crane *v.* Price, 5 Scott, N. R. 339.
Buck *v.* Hermance, 1 Blatch. 404.
Pitts *v.* Whitman, 2 Story, 618, &c.
O'Reilly *v.* Morse, 15 How. 123.
McCormick *v.* Seymour, 2 Blatch. 246.
Forbush *v.* Cook, 2 Fisher, 672.
Foster *v.* Moore, 1 Curtis, 291.
Wilson *v.* Barnum, 2 Fisher, 635.

It is not important whether it required much or little thought, study, or experience, to make the combination, or much or little expense to devise and execute it; and it is decisive that a new mode of operation has been introduced, if either a new effect, or a better effect, or as good an effect, more economically attained, is produced by the change.

Forbush *v.* Cook, Curtis, J. 2 Fisher, 672.
Earle *v.* Sawyer, 4 Mas. 1, 7–8.
Davol v. Brown, 1 Woolb. & M. 53
Russell v. Crowley. Web. Pat. Cas. 464.

In the case cited of Crane *v.* Price, 5 Scott, N. S. 339, also 1 Web., Pat. Cases, 375–409, the improvement consisted in a new process of making iron. Before the plaintiff's patent in the manufacture of iron, the use of the hot blast with bituminous coal was known, and the use of a cold blast with anthracite coal was known; but the plaintiff's invention consisted in the use of the hot blast with anthracite coal, creating a greater yield with less expense, while the nature, properties, and quality of the iron was better; and the invention was held patentable.

When a specific machine already exists producing certain effects, if a mere addition is made to such machine to produce *the same effects* in a better manner, the patent should be for the improvement only; but if to an old machine some new combinations be added to produce *new effects*, the right of the patent is for the new combination.

Whittemore *v.* Cutter, 1 Gallis, 480.

2. It is *objected* by the defendant that the combination is not new, and not patentable; that it is only a substitution, or a new application of an old device.

(*a.*) And is claimed that the Smith machine (viz., the Green machine with the smooth revolving roller), with like parts co-operating together substantially like the plaintiff's, except having a *smooth*, instead of an *engraved*, roller, is the same substantial device as the plaintiff's invention.

(*b.*) To maintain this position, it must be established that the Smith machine contains an application of the same or analogous elements operating in the same way to produce the same or an analogous effect.

(1.) *The combination in the two machines is substantially unlike, because the elements are substantially unlike.*

(*a.*) The rollers used as elements in said combinations are not the same, nor analogous.

An analogous element is one performing the *same function* in the combination, though the material of which it is constructed or the purpose to which it is applied may be different.

For instance, if the roller used in the Smith machine for polishing leather were made of iron, a roller substantially like it, made of wood, used in a like combination for polishing pasteboard, would be an analogous element, producing an analogous effect. The function of the element would be the same.

(2.) *These two combinations do not produce the same nor analogous effects, because of the rollers being different.*

An analogous effect must be the *same kind* of an effect, though the material on which the effect is produced may be different.

For instance, if the Smith machine produced a polish upon leather, it would be an analogous effect to produce a polish upon pasteboard.

(3.) *But the effects produced by these two combinations are not alike nor analogous;* the Smith machine producing a polish, and the plaintiff's machine producing the pebbled grain, upon the leather.

(4.) The *effect* or result produced by the two combinations is a *practical test* of the identity of the combinations and the patentability of the plaintiff's invention.

Curtis on Pat. § 8, 9, 14, 15, and notes, & § 330 - 331 and note.
Hall *v.* Wiles, 2 Blatch., 200.
Law's Dig., 423.

A useful new *result* implies invention in the machine to produce the effect.

Forbush *v.* Cook, 2 Fisher, 672.

And the assumed fact that the engraved roller was in use by hand, or in some other machine constructed and operating unlike the plaintiff's, and also that the Green machine was known prior to the plaintiff's invention, does not affect this conclusion.

For a new *combination* of *old parts* to produce a new, a better or cheaper effect, is patentable.

(5.) If it called for *invention in the means of applying* said engraved revolving roller so as to produce the pebbled grain or finish as perfectly and cheaply as is done in the plaintiff's machine, instead of the smooth roller to produce the polish, this instruction ought not to have been given.

For the conditions assumed by this prayer do not exclude invention in such means.

(6.) The defendant claims that late English cases cited carry this doctrine which he invokes far enough to make it applicable to this case, and to defeat this patent.

The doctrine upon this point in the English cases cited is substantially the same as in the American cases.

The cases bearing upon this point, in which the alleged invention is not patentable, are comprised generally in one of the following classes: —

1. Where it is an application of an old machine to a new purpose, without novelty in the application; or,

2. Where it is an application of old elements in the same way to produce an analogous effect; or,

3. Where it is an application of analogous elements in the same way to produce the same or an analogous effect;

The case at bar falling under the third above classification, if either, but not applicable thereto as before discussed.

(*a.*) The case of Harwood *v.* The Great Northern Railroad Company, cited by the defendant's counsel, is simply, as stated by the Court, "a new application of an old contrivance, in the old way, to an analogous subject, without any novelty of invention in the mode of applying such contrivance to the new purpose."

8 Jurist N. S. 1120.

The *fishes* had before the alleged invention been applied to *wood*, but not to *iron*, in substantially the same way, to produce the same effect.

It was a use of analogous elements, operating in the same way, to produce the same result.

(*b.*) The case of Horton *v.* Mabon, 12 C. B. n. s. 437, cited, is for an application of a known article to an analogous purpose.

Earle J. p. 450. do.

The case recognizes the general rule that a new combination of old elements to produce a new effect is the subject of a valid patent.

(*c.*) The case of Brook *v.* Aston, 8 Ellis & B. 478, cited.

This was an application of an old device to an analogous purpose.

The same device for preparing the threads of wool in controversy had been before employed in the same way to produce an analogous effect on cotton thread.

(*d.*) The case of Hotchkiss *v.* Greenwood, 11 How. 269, cited.

This was a case of the application of clay or porcelain for metallic knobs constructed and operating in the same way and for the same purpose.

This was an application of an analogous material, in the same way, for the same purpose, and producing no new effect, the only difference being the material.

(*e.*) The case of Ralston *v.* Smith, 9 Com. B. n. s. 117, cited.

This case is decided upon another point not directly involving the point in issue here.

1. The original specification does not disclose a combination of the inequality of motion with a pattern roller and bowl so as to obtain both lustre and the pattern at the same time, by pointing out therein the particular substance for the roller, and the particular *pattern* thereon that could be so used, nor the beneficial result thereby produced. Hence the Court says it is an impracticable generality, and, as described, *useless*. And the invention or discovery that two rollers which, by the design of the manufacturer, were made to revolve at equal speeds could be made to revolve at unequal speeds is not the subject of a valid patent.

2. The disclaimer could not turn the specification for an *impracticable generality* into a grant for a specific process comprised within the generality, but requiring experiment or invention to reach that specific process. It does not enlarge the original specification.

See pp. 144–145, etc.

By implication, had the original specification contained the specific process and material and utility disclosed in the disclaimer, the patent would have been valid.

(7.) The numerous other cases cited by the counsel will all be found to rest on one of the non-patentable conditions before stated. For instance:

In Regina *v.* Cutler, 3 Car. and Kir. 215, etc. The tubes in the steamboilers, whether *iron*, or iron coated with an alloy, were the same in construction, only differing in material, and are applied to the same purpose to produce the same effect.

In Parker *v.* Stevens. Patent for the Globular Lantern and Sliding Door combined, and defendant used *only one of the elements of the combination.*

In Losh *v.* Hague Web. Pat. Cases, 302. Wrought iron wheels were old, and the patent was only applying an old thing to a new purpose to produce the same effect.

In Winans *v.* Boston and Prov. R.R. The projection of the axle of the wheel and box outside, with outside bearings, had been in use for common carriages, and the invention claimed was solely in applying an old thing to a new and similar purpose to produce the same effect, and on that account not patentable.

In Bean *v.* Small. The *catch* was the applying of an old thing to a new purpose; and so on through the cases cited on the brief of plaintiff in error.

Had the English Court intended in any of the late cases to modify the doctrine so clearly and forcibly expressed in Crane *v.* Price, 5 Scott N. R. 339, and so frequently both before and after that case, some mention would have been made of it at least, if not elaborate discussion.

III.

The substance of the third prayer is: Assuming the combination of old elements to produce a better and cheaper effect, — a beneficial result, — if such combination calls for nothing but common skill and knowledge of a mechanic, it is not a patentable novelty.

In other words, it is a prayer to instruct the jury that what the law calls a patentable novelty is not a patentable novelty, if they find it within the common knowledge and skill of a mechanic.

1. The prayer is ambiguous, being uncertain whether only common knowledge and skill is to be employed *upon suggestion*, or *without suggestion.*

(*a.*) If *without suggestion*, then it asks the Court to instruct the jury that they may find the combination is not a patentable invention which the law presumes to be patentable.

(*b.*) The law has no regard to the process of mind by which the invention was accomplished, whether simple or complicated, by accident, or by long and laborious thought.

Forbush *v.* Cook, ante.
Earl *v.* Sawyer, 4 Mas. 1-6.
Crane *v.* Price, ante.

The great question being, Is it new and is it useful?

If the prayer means that such skill and knowledge are to be used *upon suggestion*, it is manifest that it could be no test of patentable novelty.

IV.

The fourth prayer involves the same, and is subject to the same answer.

1. The Court drew the true distinction in his instructions given, applicable to both 3d and 4th prayers, viz.: "If the machines are similar, if they produce similar results, and the question is whether it is a new combination, whether it is a new arrangement of machinery, then it is important to know whether any constructor acquainted with one machine could, by his common knowledge and skill, make the other, and work out that result in a somewhat more perfect manner. It is an important test in that sense. It is not a test whether an ordinary mechanic can make the combination if it is suggested;" and also as stated in special relation to the Garner machine. pp. 27, 28, of charge.

Perfecting an invention by superior skill in the mechanical arrangement of the parts, is mechanical;

While a new combination or arrangement of machinery, new or old, producing a useful result, is *invention*.

McCormick *v.* Seymour.
Nelson J. Ms. 1851.

The best practical test to determine where ordinary mechanical skill ends, and invention

begins, is when the combination of known elements produces new and useful results to the public not before attained; then it is invention.

Forbush *v.* Cook, ante.
Smith ex parte. Dunlop App. Cases.
Law Dig. 423.
4 Mas., 1–8, ante.

And the finding of the jury under the instructions establishes the *fact* that the combination was new, and that a new and useful result was produced by the invention.

In the 3d and 4th prayers, the supposed substitution of the engraved or revolving roller for the smooth or engraved rubbing tool *might require invention of means* of *applying* the revolving engraved roller so as to produce the effect produced by the plaintiff's machine.

But the said prayers do not assume that such invention is not required, yet ask the Court to instruct, that in the assumption stated therein the plaintiff's patent is void.

Hence said prayers were rightly refused.

V.

(~~SIXTH ALLEGED ERROR~~.)

This prayer raises the point of the alleged invention having been patented or described in some printed publication, under Stat. 1836, ch. 357, sec. 7.

Was the *suggestion* a description in a printed publication within the meaning of the statute?

The Court instructed the jury, if they found it was, so that it required but ordinary skill and knowledge of a mechanic to make the substitution, and that it was within the ordinary skill and knowledge of a mechanic to know what tool was meant, that machine would anticipate the plaintiff's.

The question is, what did Hebert, the patentee, *describe?*

Was the description, when made, so perfect as to enable a mechanic of ordinary skill and knowledge to make the substitution?

Hebert cannot be presumed to have *described*, by suggestion only, a tool which was not known at the time. The specification refers also *to tools* used in hand work. It is not enough to defeat a patent that the invention has been *suggested* in some printed publication; it must be *described*, and not being described it was not patented.

If it is claimed that such skill and knowledge is to be applied under the conditions claimed in the 3d and 4th prayer, then the instructions there applied are alike applicable here.

To authorize the instruction sought by this prayer, the defendant should have assumed further, that the jury should find that such machines, when the supposed substitution had been made, would do the same work, or produce the same substantial effect upon the leather.

The condition in the prayer is only that the substitution of the tool that revolves upon its axis and indents the figure upon the leather, instead of the one which rubs, be effected to anticipate and make void the plaintiff's invention.

Now, assuming that a mechanic, by his ordinary skill, might, from such suggestion, make such substitution, so that the figured roller should revolve upon its axis and indent the figure upon the leather, it by no means follows that such arrangement would produce the same substantial effect upon the leather, and that the plaintiff's invention was thereby anticipated.

Under the instructions, the verdict finds that the defendant did not establish his defence that the Hebert machine was constructed and operated in substantially the same way, and produced the same effect, as the plaintiff's.

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Attorney for Defendant in Error.

TRANSCRIPT OF RECORD.

SUPREME COURT OF THE UNITED STATES.

No. 380.

THE UNITED STATES, EX REL. AUGUSTUS O. BOURN, APPELLANT,

vs.

CHARLES GOODYEAR, JR., EXECUTOR OF CHARLES GOODYEAR, DECEASED.

APPEAL FROM THE CIRCUIT COURT OF THE UNITED STATES FOR THE SOUTHERN DISTRICT OF NEW YORK.

FILED DECEMBER 15, 1868.